DOCUMENT RESUME

ED 470 851 CE 083 427

AUTHOR	Blanck, Peter David; Sandler, Leonard A.; Schmeling, James L.; Schartz, Helen A.
TITLE	The Emerging Workforce of Entrepreneurs with Disabilities: Preliminary Study of Entrepreneurship in Iowa.
SPONS AGENCY	National Inst. on Disability and Rehabilitation Research (ED/OSERS), Washington, DC.
PUB DATE	2000-00-00
NOTE	75p.; Paper presented at America's Workforce Network Research Conference (Washington, DC, June 26-27, 2001). Research also supported by the University of Iowa College of Law Foundation, Iowa Department of Vocational Rehabilitation Services, Iowa Department for the Blind, and the Iowa Department of Economic Development.
AVAILABLE FROM	For full text: http://ows.doleta.gov/nrc/pdf/ blanck.pdf.
PUB TYPE	Journal Articles (080) -- Reports - Research (143) -- Speeches/Meeting Papers (150)
JOURNAL CIT	Iowa Law Review; v85 p1583-1661 2000
EDRS PRICE	EDRS Price MF01/PC04 Plus Postage.
DESCRIPTORS	Adult Programs; Career Choice; *Disabilities; Educational Research; Employment Level; Employment Patterns; *Entrepreneurship; Federal Legislation; Interviews; Labor Force; Labor Force Development; Literature Reviews; Motivation; *Participant Characteristics; Partnerships in Education; Private Sector; *Program Design; Program Effectiveness; Public Sector; Questionnaires; Research Methodology; *Self Employment; State Programs; Statewide Planning; Tables (Data); Trend Analysis; Work Attitudes
IDENTIFIERS	Americans with Disabilities Act 1990; Impact Studies; *Iowa; Workforce Investment Act 1998

ABSTRACT

Iowa's emerging workforce of entrepreneurs with disabilities and the design of Iowa's Entrepreneurs with Disabilities (EWD) program were examined in an exploratory study. The study focused on the following issues: organizational characteristics of the EWD program; the characteristics of EWD applicants and their motivations for choosing self-employment; the impact of disability on potential success as an entrepreneur; the impact of participation in the EWD program; and questions for future study of entrepreneurs with disabilities. Data were collected from the following sources: (1) a literature review; (2) a review of Iowa's EWD program and its policies and procedures; (3) an analysis of more than 500 EWD program applications, and (4) telephone interviews with a stratified subsample of 30 EWD participants. Of the 30 EWD applicants interviewed, 25 (83%) reported having had incomes before the onset of their disability (median pre-disability income, $25,000). The following were among the recurrent themes mentioned by the interviewees: the economic implications of self-employment; independence and commitment to self-employment; health care and insurance needs associated with self-employment; encountering discrimination before and after self-employment; and the challenges of staying self-employed. The summary form of the structured and open-ended interview questions is appended. (Contains 299 footnotes.) (MN)

Reproductions supplied by EDRS are the best that can be made
from the original document.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
P. Blanck
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1

ED 470 851

The Emerging Workforce of Entrepreneurs with Disabilities: Preliminary Study of Entrepreneurship in Iowa

Peter David Blanck, Leonard A. Sandler, James L. Schmeling, and Helen A. Schartz[1]

I. INTRODUCTION 1585

II. EMPLOYMENT OF PEOPLE WITH DISABILITIES 1588
A. *OVERVIEW* 1588
B. *SELF-EMPLOYMENT AND ENTREPRENEURS WITH DISABILITIES* 1590
1. Illustrative Prior Research 1595

III. IOWA'S ENTREPRENEURS WITH DISABILITIES: THREE EXPLORATORY STUDIES 1599
A. *OVERVIEW* 1599
B. *STUDY I: ORGANIZATIONAL ANALYSIS OF EWD PROGRAM* 1601
C. *STUDY II: DEMOGRAPHIC ANALYSIS OF EWD APPLICANTS* 1611
D. *STUDY III: INTERVIEWS WITH EWD PARTICIPANTS* 1627

1. Peter David Blanck, Ph.D., Harvard; J.D., Stanford; Professor of Law, of Psychology, and of Occupational Medicine, The University of Iowa; Director, Law, Health Policy & Disability Center [LHP&DC]. Leonard A. Sandler, J.D., Maryland; Clinical Professor of Law, The University of Iowa College of Law; Co-Director, LHP&DC. James L. Schmeling, J.D., Iowa; Assistant Director, LHP&DC. Helen A. Schartz, Ph.D., Iowa; J.D. Candidate, Iowa; Assistant Research Scientist, LHP&DC. The program of research described herein is supported, in part, by grants from The University of Iowa College of Law Foundation and the National Institute on Disability and Rehabilitation Research (NIDRR) of the U.S. Department of Education. The views expressed in this Article are those of the authors and do not reflect the views of any other entity.

The authors wish to thank the Iowa Department of Vocational Rehabilitation Services, Iowa Department for the Blind, and Iowa Department of Economic Development for their support of this research project. In particular, we thank Dwight Carlson, Creig Slayton, Ken Boyd, Ruth Burrows, Ralph Childers, Patti Lind, Dixie Radke, and the EWD counselors and consultants. This work also would not have been possible without the generous commitment of time from the EWD participants. Thanks also to our colleagues who provided comments on earlier versions of this Article, including Ruth Brannon, Michael Morris, and Michael Stein. Additional thanks to Elisa Davies, Deborah Hunter, Trystan Pfeifer O'Leary, LeGrande Smith, David Dawson, Todd McManus, Cynthia Halberg, and Michal Schroeder for their research assistance.
© *2000.*

CE 083 427

BEST COPY AVAILABLE

IV. IMPLICATIONS 1636
A. *RESEARCHING THE CONTINUUM OF EMPLOYMENT AND DISABILITY* 1637
B. *RESEARCHING SELF-EMPLOYMENT AND ENTREPRENEURS WITH DISABILITIES* 1638
C. *RESEARCH QUESTIONS AND ISSUES UNRESOLVED* 1644

V. CONCLUSION 1646

APPENDIX I. DEMOGRAPHIC DATA TABLES: ENTREPRENEURS WITH DISABILITIES PROGRAM APPLICANTS AND INTERVIEWEES 1648

APPENDIX II. STRUCTURED AND OPEN-ENDED INTERVIEW QUESTIONS: SUMMARY FORM 1659

I. INTRODUCTION

In a series of empirical studies, we are investigating the composition, quality, and competitiveness of the emerging workforce of persons with disabilities. The questions include:

- What types of employment opportunities will be available to qualified workers with disabilities? And, what are their incentives and disincentives to employment?
- What will be the characteristics and qualifications of an increasingly diversified and aging workforce, and will it include millions of persons with disabilities?
- What types of job and career training, accommodations, and financial and technological support will be available to that workforce?
- How will the changes that have occurred in the last ten years in disability, welfare, health care, and technological policy affect that workforce?

To address these questions, we and researchers from multiple disciplines are examining large and small corporations, entrepreneurial and self-employment activities, economic and labor market trends, and employment policies and laws, such as the Americans with Disabilities Act of 1990[2] (ADA) and the Workforce Investment Act of 1998[3] (WIA).

In 1998, the Presidential Task Force on Employment of Adults with Disabilities began a comprehensive initiative focusing on attitudes toward persons with disabilities in employment and other areas central to daily life.[4] One goal of the Task Force is to increase the range of employment opportunities available to adults with disabilities. Alternatives include participation in self-employment and entrepreneurial activities, small businesses, temporary work, and large corporate work activities. In 1999, the Department of Labor continued this initiative in its report entitled *Futurework: Trends and Challenges for the 21st Century*.[5] *Futurework* was designed to provoke dialogue about employment initiatives among employers,

---

2. 42 U.S.C. §§ 12101-12113 (1994). *See generally* Susan Schwochau & Peter David Blanck, *The Economics of the Americans with Disabilities Act: Part III—Does the ADA Disable the Disabled?*, 21 BERKELEY J. EMP. & LAB. L. 271-313 (2000) (discussing the ADA and these research issues).

3. 29 U.S.C. §§ 2801-2945 (Supp. IV 1998). WIA includes the Rehabilitation Act Amendments of 1998, which amended the Rehabilitation Act of 1973. WIA provides that funds be allocated for entrepreneurial training for adults in the generic workforce development system. *See* Workforce Investment Act of 1998, tit. I, subtit. B, ch. 5, § 134(d)(4)(D)(vi). Vocational Rehabilitation (VR) systems are to include self-employment services for people with disabilities. *See* Workforce Investment Act of 1998, tit. IV, §§ 403-404.

4. *See* PRESIDENTIAL TASK FORCE ON EMPLOYMENT OF ADULTS WITH DISABILITIES, RE-CHARTING THE COURSE: IF NOT NOW, WHEN? (1998) [hereinafter RE-CHARTING THE COURSE], *available at* http://www.dol.gov/dol/_sec/public/programs/ptfead/rechart/sat5PTFEADfinalwp. htm (discussing social attitudes concerning employment, health care, and transportation).

5. DEP'T OF LABOR, FUTUREWORK: TRENDS AND CHALLENGES FOR THE 21ST CENTURY (1999), *available at* http://www.dol.gov/dol/asp/public/futurework/report.htm [hereinafter FUTUREWORK] (examining the increasing diversification of the American labor force and its relevance to the development of employment opportunities and employers' competitive labor force strategies).

BEST COPY AVAILABLE

policymakers, and persons with disabilities.

Building on these prior efforts, the President's Committee on the Employment of Persons with Disabilities (PCEPD) initiated a project to help persons with disabilities obtain equal access to programs that support small businesses and entrepreneurs.[6] The goal of the project is to ensure that public and private employment programs for people with disabilities include training and assistance in self-employment and entrepreneurial activities. In 2000, the PCEPD released the report *Getting Down to Business: A Blueprint for Creating and Supporting Entrepreneurial Activities for Individuals with Disabilities*. That report set forth the recommendations of a blue-ribbon panel that had addressed self-employment, small business, and disability.[7]

The present Article is the first in a series exploring one point in the continuum of employment activities of persons with disabilities—self-employment and entrepreneurial activity. The investigation examines how self-employment expands employment opportunities and improves quality of life for people with disabilities in Iowa. The goals of this initial study are three-fold:

> 1. to foster a *meaningful and productive dialogue* about self-employment and entrepreneurship of persons with disabilities;
>
> 2. to thereby *raise awareness* about entrepreneurs with disabilities' work capabilities, qualifications, and value to the American economy; and,
>
> 3. to *enhance effective and fair implementation* of public and private initiatives that promote entrepreneurial opportunities for individuals with disabilities.

The centerpiece of the Article is an exploratory study of Iowa's Entrepreneurs with Disabilities (EWD) program. A subsidiary goal is to provide a descriptive sketch of the EWD program and its entrepreneurs by identifying characteristics of the program. These goals were pursued through three initial investigations, designated below as Studies I, II, and III. The research questions that guided the investigations include:

Study I: Organizational Analysis of EWD Program

- What are the organizational characteristics of Iowa's EWD program?
- What is the nature of the program's public-private partnership?

Study II: Demographic Analysis of EWD Applicants

- What are the characteristics of aspiring entrepreneurs with disabilities and their motivations for choosing self-employment?

---

6. *See* PRESIDENT'S COMMITTEE ON EMPLOYMENT OF PEOPLE WITH DISABILITIES, SMALL BUSINESS AND SELF-EMPLOYMENT FOR PEOPLE WITH DISABILITIES, *at* http://www50.pcepd.gov/pcepd/projects/promotin.htm (last visited Sept. 14, 2000) [hereinafter PRESIDENT'S COMMITTEE].

7. P.R. LIND & CO. FOR PRESIDENT'S COMMITTEE ON EMPLOYMENT OF PEOPLE WITH DISABILITIES, GETTING DOWN TO BUSINESS: A BLUEPRINT FOR CREATING AND SUPPORTING ENTREPRENEURIAL ACTIVITIES FOR INDIVIDUALS WITH DISABILITIES (2000) [hereinafter P.R. LIND & CO., GETTING DOWN TO BUSINESS] (on file with the Iowa Law Review).

- What is the impact of disability on interest in entrepreneurial activity and self-employment?

Study III: Interviews with EWD Participants

- What is the impact of disability or other personal or environmental characteristics on a person's potential success as an entrepreneur?
- What is the impact of participation in Iowa's EWD program generally? And, how does entrepreneurship and self-employment contribute to economic and job growth in Iowa and elsewhere?

Illustrative Questions for Future Study of Entrepreneurs with Disabilities

- How will researchers measure "successful" employment outcomes and quality of life for entrepreneurs with disabilities?
- Are entrepreneurs with disabilities aware of and using federal and state initiatives relating to workforce development, private and public benefits programs, and civil rights statutes, such as the ADA?

Few studies have examined self-employment as an option for persons with disabilities. The Montana University Affiliated Rural Institute on Disabilities is an exception.[8] The program has both studied and fostered self-employment as a vocational rehabilitation strategy for disabled persons. Professor Nancy Arnold and her colleagues at the Montana Institute have examined the motives and characteristics of disabled entrepreneurs, their career paths, and the impact of their businesses on local communities.[9] They have compared self-employment outcomes in rural and urban areas[10] and have studied the effects of state vocational rehabilitation (VR) agencies' assistance on self-employment outcomes of people with disabilities.[11]

Like Montana's initiative, Iowa's EWD initiative developed from grass roots movements. Such advocacy occurred years before the government formally acknowledged self-employment as an employment option by emphasizing it in the 1998 Presidential Task Force Report[12] and the Workforce Investment Act.[13] This Article presents a preliminary portrait of Iowa's EWD program. It is designed to aid in the cumulation of information about self-employment of individuals with disabilities in the context of changes in work and welfare policies over the past ten

8. *See* MONTANA UNIVERSITY AFFILIATED RURAL INSTITUTE ON DISABILITIES, SELF-EMPLOYMENT FOR PEOPLE WITH DISABILITIES, *at* http://ruralinstitute.umt.edu/rtcrural/Selem/ RuSelEm.htm (last visited Sept. 14, 2000) [hereinafter RURAL INSTITUTE] (describing extensive program of study and findings).

9. *See id.*

10. *See id.*

11. *See id.*

12. *See generally* RE-CHARTING THE COURSE, *supra* note 4 (discussing efforts to increase the range of employment options available to disabled adults, including self-employment).

13. *See generally* Workforce Investment Act of 1998, 29 U.S.C. §§ 2801-2945 (Supp. IV 1998) (providing that funds be allocated for entrepreneurial training).

BEST COPY AVAILABLE

years.[14]

The next section of this Article reviews the employment status of persons with disabilities in general, with analysis of prior research on self-employment and entrepreneurial activity in particular. The third section then describes Iowa's EWD program and its policies and procedures (Study I). It identifies barriers to self-employment, as reported by the EWD program staff and by Iowans with disabilities. This section also presents an analysis of more than 500 EWD program applicants (Study II) and describes findings from interviews with a sub-sample of EWD participants (Study III).

Finally, the fourth section discusses ways that Iowa's EWD program and other programs may assist consumers, Department of Vocational Rehabilitation Services (DVRS) counselors, lawmakers, and policymakers in fostering self-employment options. In light of recent laws and policies enacted to enhance disabled persons' workforce participation, the final section examines how researchers may use the present findings to help address the unemployment problem faced by millions of Americans with disabilities who are able to work and interested in working for themselves and others.

II. EMPLOYMENT OF PEOPLE WITH DISABILITIES

A. Overview

The employment rate for people with disabilities is stunningly low compared to that of people without disabilities.[15] Information from the Current Population Survey (CPS) suggests that only 30.4% of those persons with a work disability between the ages of sixteen and sixty-four were in the labor force in 1998. However, 82.3% of nondisabled persons in the same age category were either employed or actively seeking work for pay.[16] Of individuals with disabilities who were employed, 63.9% held full-time jobs. For nondisabled employed persons, the comparable figure was 81.5%.

Earnings statistics are similarly unbalanced. In 1997, the mean earnings of individuals with work disabilities holding full-time, year-round jobs was $29,513, whereas the mean earnings of nondisabled individuals in such jobs was $37,961. In addition, persons with disabilities have far lower levels of education than individuals without disabilities. Nearly 31% of those with work disabilities had not com-

14. This initial portrait is developed in Study I with the use of qualitative research techniques, archival data sources, interviews, and observation techniques. The goal is to identify themes surrounding self-employment and micro-enterprise formation (as illustrated further by the subsequent analysis in Studies II and III).

15. *See generally* LOUIS HARRIS & ASSOCIATES COMP., 2000 NATIONAL ORGANIZATION ON DISABILITY/HARRIS SURVEY OF AMERICANS WITH DISABILITIES, *available at* http://www.nod.org/hs2000.html [hereinafter 2000 N.O.D./HARRIS SURVEY] (reporting that 68% of people with disabilities are unemployed compared with 19% of people without disabilities); LOUIS HARRIS & ASSOCIATES COMP., 1998 NATIONAL ORGANIZATION ON DISABILITY/HARRIS SURVEY OF AMERICANS WITH DISABILITIES, *available at* http://www.nod.org/presssurvey.htm [hereinafter 1998 N.O.D./HARRIS SURVEY] (reporting that 71% of people with disabilities were unemployed compared with 21% of people without disabilities).

16. *See* U.S. CENSUS BUREAU, CURRENT POPULATION SURVEY (1998), *at* http://www.census.gov/hhes/www/disable/disabcps.html (defining work disability and stating that individuals are considered to be in the labor force if they are employed, or are not employed but are actively seeking work for pay).

BEST COPY AVAILABLE

pleted high school, while only 17.5% of nondisabled individuals had not done so. Although 23.8% of nondisabled individuals had more than sixteen years of education, only 10.5% of individuals with disabilities attained that level of education.[17]

This is not to say that all of the available information paints such a dismal picture.[18] Some evidence indicates that the employment of those with disabilities has been increasing. In 1991 and 1992, information from the Survey of Income and Program Participation (SIPP) suggested that 23.2% of individuals with severe disabilities between the ages of twenty-one and sixty-four were employed.[19] Comparable figures from 1994 to 1995 indicate that this rate had increased to 26.1%.[20] A more recent analysis of SIPP information from 1994 to 1997 shows that employment rates for persons with nonsevere disabilities increased from 77% to 81%.[21] Although during 1994 to 1997 employment rates for those with severe disabilities declined from 34% to 29%, overall employment rates for this group were substantially higher than in 1991.[22]

A series of studies suggests that substantial numbers of persons with mental retardation have attained and retained competitive employment since the ADA was enacted.[23] Evidence also indicates that individuals with disabilities have attained higher levels of education over time.[24] However, the overall findings are mixed.

---

17. *Cf. infra* notes 160-61 and accompanying text (discussing educational levels of EWD applicants and entrepreneurs).

18. *See, e.g.*, Peter David Blanck, *Studying Disability, Employment Policy and the ADA, in* AMERICANS WITH DISABILITIES: EXPLORING IMPLICATIONS OF THE LAW FOR INDIVIDUALS AND INSTITUTIONS 209-20 (Leslie Pickering Francis & Anita Silvers eds., 2000) (reviewing studies on employment, the ADA, and disability); Michael Ashley Stein, *Labor Markets, Rationality, and Workers with Disabilities*, 21 BERKELEY J. EMP. & LAB. L. 314, 314-34 (2000) (same).

19. JOHN M. MCNEIL, U.S. DEP'T OF COM., CURRENT POPULATION REP. NO. P70-33, AMERICANS WITH DISABILITIES: 1991-92, at 62 tbl.24 (1993) [hereinafter MCNEIL, 1991-92 SIPP STUDY].

20. JOHN M. MCNEIL, U.S. DEP'T OF COM., CURRENT POPULATION REP. NO. P70-61, AMERICANS WITH DISABILITIES: 1994-95, at 7 tbl.2 (1997) [hereinafter MCNEIL, 1994-95 SIPP STUDY], *available at* http://www.census.gov/hhes/www/disable/sipp/disab9495/ds94tl.html. *See also* H. STEPHEN KAYE, U.S. DEP'T ED., NATIONAL INSTITUTE ON DISABILITY AND REHABILITATION RESEARCH, COMPUTER AND INTERNET USE AMONG PEOPLE WITH DISABILITIES, DISABILITY STATISTICS REPORT (13), at 1-2 (2000) [hereinafter KAYE, COMPUTER AND INTERNET USE] (reporting that among people aged 21-64 with severe functional limitations—a smaller group of individuals compared to those with severe disabilities—employment increased from 27.6% in 1991-92 to 32.2% in 1994-95). SIPP data shows a slight increase in employment of individuals with disabilities (a broader definition than those based on work disabilities).

21. JOHN M. MCNEIL, EMPLOYMENT, EARNINGS, AND DISABILITY (2000), *available at* http://www.census.gov/hhes/www/disability.html (discussing methodological difficulties in measuring the employment status of persons with disabilities and finding that when assessing individuals' availability for employment, employment rates for persons with disabilities increased from 77% to 80% from 1994 to 1997).

22. *Id.*; *see also* 2000 N.O.D./HARRIS SURVEY, *supra* note 15, at 2 (finding that 56% of individuals with disabilities surveyed who report that they are able to work are working in 2000, as compared to 46% in 1986); *id.* at 5-6 (finding that 57% of 18-29 year olds with disabilities who are able to work are working, compared to 72% of their nondisabled counterparts).

23. *See* PETER DAVID BLANCK, THE AMERICANS WITH DISABILITIES ACT AND THE EMERGING WORKFORCE: EMPLOYMENT OF PEOPLE WITH MENTAL RETARDATION 97-98 (1998) [hereinafter BLANCK, EMERGING WORKFORCE] (presenting statistics showing that 44% of the sample moved into more integrated employment settings over the 1990-1996 period, with 7.8% moving into competitive settings, unemployment settings, sheltered work settings, and supportive work settings).

24. *See* 1998 N.O.D./HARRIS SURVEY, *supra* note 15, at 17 (reporting that in 1986, 39% of disabled individuals responded they had not completed high school, while in 1998, 20% of disabled individuals gave that response).

Reports of successes coincide with news stories suggesting that, for the majority of those with disabilities, few improvements have been realized.[25]

Increasing the employment rate of people with disabilities who are capable of working and who want to work is a national priority.[26] Our nation currently enjoys a period of record low unemployment rates, yet millions of persons with disabilities continue to experience unemployment and underemployment. If not addressed, the unemployment problem facing the emerging generation of persons with disabilities may hold long-term negative economic and social consequences for their future and for the future of our nation.

The personal toll that unemployment has had on disabled persons is illustrated by national surveys revealing that, while almost two-thirds of adults without disabilities were very satisfied with life in general, only one third of adults with disabilities would make that claim.[27] One distinct reason for such dissatisfaction is that many qualified persons with disabilities continue to be directed to sheltered and nonintegrated jobs. These jobs often do not appeal to their interests and are not designed to allow them to achieve economic independence. The sobering demographics have prompted policymakers to search for alternative or complementary employment strategies, including entrepreneurship.[28]

B. SELF-EMPLOYMENT AND ENTREPRENEURS WITH DISABILITIES

Entrepreneurship is a vital component in the U.S. economy, and, importantly, it continues to promote economic growth and attitudinal change.[29] It has been a vehicle used by immigrants, women, minorities, and historically disadvantaged populations to secure a foothold in the American labor market.[30] When Congress enacted the ADA in 1990, it found that individuals with disabilities, like women and minorities, were a discrete, insular minority group, subjected to a history of unequal treatment and often excluded from the opportunity to participate in social,

---

25. *See, e.g.*, BLANCK, EMERGING WORKFORCE, *supra* note 23, at 98 (reporting that 47% of study participants showed no change in their employment status between 1990 and 1996); *see also* Peter David Blanck, *Civil War Pensions, Civil Rights, and the Americans with Disabilities Act*, 62 OHIO ST. L.J. (forthcoming 2001) (manuscript at 41-44, on file with authors) (discussing portrayal in the press of persons with disabilities).

26. *See* Exec. Order No. 13,078, 63 Fed. Reg. 13,111 (Mar. 18, 1998) (establishing the National Task Force on Employment of Adults with Disabilities).

27. 1998 N.O.D./HARRIS SURVEY, *supra* note 15, at 11.

28. This quest has been hampered by a cardinal unanswered question: Who is a person with a disability, and what type of work does she want to do and is capable of doing? For a review of the ADA's definition of disability, see BLANCK, EMERGING WORKFORCE, *supra* note 23, at 16-27.

29. *See* P.R. LUND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 5 (stating that approximately 10,507,000 Americans are self-employed) (citing U.S. SMALL BUS. ADMIN., SMALL BUSINESS: HEART OF THE UNITED STATES ECONOMY, SMALL BUS. PROFILE (1998), *at* http://www.sba.gov/advo/stats/profiles/98us.html); U.S. SMALL BUS. ADMIN., SMALL BUSINESS ANSWER CARD, *at* http://www.sba.gov/advo/stats/ec-ansed.html (last visited Aug. 18, 2000) (discussing statistics).

30. *See* OFFICE OF ECON. RES., U.S. SMALL BUS. ADMIN., OFFICE OF ADVOCACY, THE NEW AMERICAN EVOLUTION: THE ROLE AND IMPACT OF SMALL FIRMS (1999), *at* http://www.sba.gov/ADVO/stats/evol_pap.html (noting that small firms are the means "by which millions enter the economic and social mainstream of American society"). *See generally* THOMAS D. BOSTON, AFFIRMATIVE ACTION AND BLACK ENTREPRENEURSHIP (1999) (reviewing black entrepreneurial activity as an opportunity for economic advancement); P. CLARK & T. HUSTON, THE ASPEN INSTITUTE, ASSISTING THE SMALLEST BUSINESSES: ASSESSING MICROENTERPRISE DEVELOPMENT AS A STRATEGY FOR BOOSTING POOR COMMUNITIES (1993) (discussing micro-enterprise strategy for creating jobs).

BEST COPY AVAILABLE

economic, and cultural commerce.[31]

Today, self-employment and entrepreneurship are part of a nationwide strategy to help disabled people transition from unemployment, underemployment, or entitlements-based programs to gainful employment and self-sufficiency. In 1998, the Presidential Task Force on Employment of Adults with Disabilities recommended that the Small Business Administration (SBA) launch a campaign to educate Americans with disabilities who owned or wanted to start their own businesses. The Task Force concluded that small business drives much of the nation's economy and spurs the creation of jobs in nearly every market sector.

Statistics compiled by the SBA document the importance of micro-enterprise development to the U.S. economy. In 1997, more than 10.5 million people in the United States were self-employed.[32] About one million additional people reported self-employment as a secondary source of income.[33] Of the roughly five million businesses in the United States with employees in 1995, an overwhelming percentage (99.7%) were businesses with fewer than 500 employees.[34]

Measured from the vantage of job creation alone, the stimulation of entrepreneurial activity is a policy worth pursuing. According to SBA statistics, more than eleven million jobs were created in the United States from 1992 through 1996.[35] During the same period, businesses with fewer than nineteen employees accounted for approximately 70% of the jobs created nationwide. Nearly six million jobs were created by businesses that employed between one and four employers. Another 2.3 million jobs were created by businesses that employed between five and nineteen workers.[36]

In the past ten years, and since the passage of the ADA, people with disabilities increasingly are electing small business and self-employment opportunities.[37]

---

31. In the ADA's statement of findings, Congress found:

> Historically, society has tended to isolate and segregate individuals with disabilities, and, despite some improvements, such forms of discrimination against individuals with disabilities continue to be a serious and pervasive social problem; . . . individuals with disabilities are a discrete and insular minority who have been faced with restrictions and limitations, subjected to a history of purposeful unequal treatment, and relegated to a position of political powerlessness in our society . . . .

42 U.S.C. § 12101(a)(2), (7) (1994).

32. *See* U.S. SMALL BUS. ADMIN, OFFICE OF ADVOCACY, SMALL BUSINESS PROFILE, 1998, SMALL BUSINESS: HEART OF THE AMERICAN ECONOMY (1998), *at* http://www.sba.gov/advo/stats/profiles/98us.html [hereinafter SBA, SMALL BUSINESS PROFILE, 1998].

33. U.S. SMALL BUS. ADMIN., SMALL BUSINESS ANSWER CARD, *at* http://www.sba.gov/advo/stats/ec_anscd.html.

34. SBA, SMALL BUSINESS PROFILE, 1998, *supra* note 32.

35. *Id.*

36. Telephone and in-person interviews were conducted with Patti Lind, Iowa's EWD Program Manager, from Aug. 1, 1999 to Sept. 30, 2000 [hereinafter Interviews with Program Manager or Program Staff]. Lind emphasized the creation of businesses that employ between one and nineteen workers. *See infra* notes 235-36 (discussing interviews with EWD participants that revealed substantial job creation by and for persons with disabilities). Lind estimates that 16% of the 126 businesses that were created in the program's first five years employed other workers.

37. Note that ADA Title I covers businesses with fifteen or more employees. Some contingent work relationships may be covered under ADA Title I. *See* BLANCK, EMERGING WORKFORCE, *supra* note 23, at 14 (discussing Title I coverage); Lisa A. Schur, Contingent Employment Among Workers with Disabilities: Barriers and Opportunities 25-26 (Mar. 2000) (unpublished manuscript, on file with authors) (noting that some state disability antidiscrimination employment laws cover contingent work-

In 1993, there were 520,000 self-employed workers with disabilities.[38] Studies show that workers with disabilities are nearly twice as likely to be self-employed as workers who are not disabled.[39] The 1990 national census reported that 12% of people with disabilities had self-employment and small business experience, as compared with 8% of people without disabilities.[40] In 1994, more than 14% of individuals with disabilities owned or worked for a small business, while 8% of individuals without disabilities did so.[41]

The private insurance industry recognizes the viability of self-employment options. For instance, First Unum and several other private insurers encourage their disabled participants to consider self-employment.[42] After an assessment, business plan, and accounting review, First Unum's program allows the prospective entrepreneur to use a portion of disability benefits as start-up capital.[43] Private insurers recognize that self-employment may help reduce the costs of disability benefits when implemented efficiently.

Private lenders, banks, and SBA lending programs also recognize self-employment as a growing option for individuals with disabilities and have begun marketing their services via the Internet and more traditional venues.[44] *The Wall*

---

ers).

38. *See* Tom Seekins, *Rural Economic Development and Vocational Rehabilitation: Lessons from Analyses of Self-Employment as a Vocational Rehabilitation Outcome*, *in* THE ENTREPRENEUR WITH A DISABILITY: SELF-EMPLOYMENT AS A VOCATIONAL GOAL: A REPORT ON THE 19TH MARY E. SWITZER MEMORIAL SEMINAR 43-48 (Leonard G. Perlman & Carl E. Hansen eds., 1996), *available at* http://www.ruralinstitute.umt.edu/rtcrural/Economic_Development/Switzer_Monograph. htm.

39. *See* FUTUREWORK, *supra* note 5 (finding that disabled people are twice as likely as those without disabilities to be self-employed). *See generally* Sharon Nelton, *Can-Do Attitudes and the Disabled*, NATION'S BUS., May 1998 (noting that of 9.4 million sole proprietors in the United States, 1.7 million (18%) reported disability or limitation); Schur, *supra* note 37, at 9, 23 (discussing these statistics).

40. *Work Group on Small Business and Entrepreneurial Opportunities*, *in* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 23. *See also* PRESIDENT'S COMMITTEE, *supra* note 6 (citing these findings and noting that Rehabilitation Services Administration (RSA) statistics for 1997 show that only 2.7% of 223,668 VR clients with successful case closures became self-employed, although between 20-30% of VR clients chose self-employment as an option).

41. *See* Nancy Sullivan & Abby Cooper, Innovation, Entrepreneurship and Rehabilitation: A Good Partnership for the Twenty-First Century 1 (on file with authors) (citing Arnold and Seekins, *Self-Employment as a Vocational Rehabilitation Closure*, 5 J. DISABILITY POL'Y STUD. (1994)); LEWIS E. KRAUS & SUSAN STODDARD, CHARTBOOK ON WORK AND DISABILITY IN THE UNITED STATES, 1991 [hereinafter KRAUS & STODDARD, CHARTBOOK] (stating that, in 1988, 12.2% of people with a work disability were self-employed (443,348 out of 3,634,000), compared to 7.8% without a work disability (8,246,550 of 105,725,000), as reported by the 1988 Current Population Survey (CPS)); Thomas W. Hale et al., *Persons with Disabilities: Labor Market Activity, 1994*, MONTHLY LAB. REV., Sept. 1998, at 8 (noting that nondisabled people reported being self-employed at a rate of 10.3% (or 10,706,026 people) in nonagricultural employment, 97.4% of these worked the entire month, and 83.4% worked full time in self-employment; people with a moderate disability were self-employed at rates of 13% (1,652,040 people), 97.3% for the full month, and 75.3% full time; the percentage drops to 10.4% (or 439,816 people) for those with severe disabilities, with 92.2% of those self-employed for full month, and 64% self-employed full time).

42. *See generally* Lisa Sanders, *Giving Disabled Workers a New Start: Insurance Firms, Non-Profits Offer Benefits, Training to Promote Self-Employment*, CRAIN'S N.Y. BUS., June 29, 1998, *available at* 1998 WL 8017491.

43. *See id.*

44. For example, the Business Loan Center (BLC) has an accessible web site for applicants with disabilities applying for small business loans. Business Loan Center, *at* http://sbaloans.com/textonly (last visited Aug. 18, 2000). BLC is an SBA-approved small business lender with offices across the United States.

BEST COPY AVAILABLE

Street Journal recently profiled Greg Smith, an entrepreneur who hosts the radio show *On A Roll: Talk Radio on Life & Disability*.[45] Smith has muscular dystrophy, diagnosed thirty-one years ago when he was three. He began the talk show in 1992 with the sponsorship of BankAmerica. At the time, BankAmerica was introducing its loan program for individuals with disabilities and viewed the sponsorship as an opportunity to market its loan program. Fifteen banks in eighteen states now have instituted loan programs like the one that helped launch Mr. Smith's show.[46]

The reasons for pursuing entrepreneurship and self-employment activities are obvious to many persons with disabilities. People with disabilities continue to be disadvantaged socially, vocationally, economically, and educationally.[47] Despite improvements, discrimination against persons with disabilities continues to be a pervasive problem.[48] Moreover, in the decade since passage of the ADA, individuals continue to be defined by their disabilities, rather than their abilities, when applying for jobs.[49] The 1998 N.O.D./Harris survey found that almost half (42%) of unemployed people with disabilities reported they were unable to find work because employers did not recognize their capabilities.[50] One third (32%) of respondents who were employed said they had been discriminated against because of their disability.[51] Respondents reported that they were refused jobs, given less responsibility than coworkers, paid less than coworkers, and denied health insurance, promotions, and the opportunity to be interviewed for jobs. Forty-one percent of the respondents who were unemployed, but willing and able to work, reported similar experiences. Others reported unfavorable attitudes, physical barriers, and unmet needs for workplace technology.[52] Frustrated in their attempts to secure meaningful employment, many persons with disabilities who want to work choose self-employment and the opportunity to contribute to the economy as taxpayers and employers of persons with or without disabilities.

For many people with disabilities, self-employment also serves as a platform for innovation and attitudinal change. As a fountainhead of e-commerce, small business fuels technological advancements that expand opportunities for home-based businesses and provide workplace accommodations needed to hire or retain workers with disabilities.[53] Thus, as policy and attitudinal shifts expand the market

---

45. Joshua Harris Prage, *Media: Radio Host is 'On a Roll' with Show for the Disabled*, WALL ST. J., Feb. 25, 1999, at B1.

46. *Id.*

47. *See* Americans with Disabilities Act, 42 U.S.C. § 12101(a)(2)-(3) (1994) (describing legislative findings).

48. *See infra* notes 49-52 and accompanying text (discussing EWD interviewees' prior employment discrimination).

49. 1998 N.O.D./HARRIS SURVEY, *supra* note 15, at 43.

50. *Id.* at 46.

51. *Id.* at 55.

52. *Id.* at 56.

53. *See* Karen Solomon, *DPI: Enabling the Disabled*, WIRED NEWS ONLINE (Sept. 27, 1999) *at* http://www.wired.com/news/print_version.culture/story/21940.html (noting that DPI, a Silicon Valley nonprofit firm that assists people with disabilities to obtain technology related jobs, provides assistive technology and education to employees and employers); Kris P. Maher, *New Interest: Internet Offers New Freedom to the Disabled*, WALL ST. J., June 24, 1999, at 1, *available at* 1999 WL-WSJ 5457818 (discussing the Internet as a means of achieving full participation in society); Heidi M. Berven & Peter David Blanck, *The Economics of the Americans with Disabilities Act, Part II—Patents and Innovations in Assistive Technology*, 12 NOTRE DAME J.L. ETHICS & PUB. POL'Y 9, 11-13 (1998) (discussing inno-

for goods that improve accessibility, entrepreneurs and employers affecting e-commerce are responding to the economic consequences of the ADA's implementation. In other research, we are examining the ways that the ADA and its civil rights protections function in such a "technology stimulating" manner.[54] The currently untapped, yet accessible, e-commerce marketplace holds vast profit-making opportunities for entrepreneurs with and without disabilities.[55]

Entrepreneurship also is a laboratory for developing changes in workplace dynamics and productivity. Concepts such as job-sharing, telecommuting, and flextime, pioneered by small businesses, are being incorporated into the cultures of larger business organizations. Many small businesses are willing to provide workplace accommodations to their employees, even when the law does not require them.[56] Small business owners with disabilities often are amenable to accommodate their employees with disabilities because they recognize the potential of these employees and have first hand knowledge of the barriers they encounter.[57] Business ventures owned by people with disabilities serve as models for others and raise awareness about the skills and competencies of persons with disabilities.

To understand the reasons why people with and without disabilities start their own businesses, researchers have profiled the motivations and competencies of successful entrepreneurs. Hisrich and Brush's study of minority entrepreneurs identified several key characteristics of successful entrepreneurs, including achievement, opportunity, job satisfaction, independence, economic necessity, career security, power, and status.[58] Similarly, Clayton noted that the successful entrepreneur must be aggressive, competitive, goal-oriented, opportunistic, intuitive, and a calculated risk-taker.[59] Researchers Sullivan and Cooper received responses from entrepreneurs with disabilities that comported with Clayton's characteristics. Those entrepreneurs reported that they value having control over their schedules and transportation, flexibility in job tasks, and workplace accommodations. They also reported increased self-confidence, community involvement, perceived status, meaning in work, and income potential.[60]

The common thread is that people—with or without disabilities—choose self-employment because they prefer to be their own boss, want financial independence,

---

vations in assistive devices for disabled persons since the passage of ADA).

54. *See generally* EMPLOYMENT, DISABILITY, AND THE AMERICANS WITH DISABILITIES ACT (Peter David Blanck ed., 2000); Peter David Blanck et al., Corporate Culture, Disability, and Competitive Strategy: A Case Study of a Large Technology Company (Research in Progress at the Law, Health Policy & Disability Center, Iowa City, Iowa).

55. *See* Jenny Strasburg, *Pushing for Net Access Activists Point Out that Big Profits Await Web Sites that Accommodate the Disabled*, S.F. EXAMINER, Mar. 26, 2000, at B1, *available at* 2000 WL 6161160.

56. Companies with fifteen or more employees covered by the ADA must provide reasonable accommodations to qualified workers with disabilities, including job restructuring, modified work schedules, acquisition equipment, and training materials. 42 U.S.C. § 12111(9) (1994). Most Iowa EWD businesses employ fewer than fifteen full-time workers but may be subject to the Iowa Civil Rights Act of 1965. IOWA CODE § 216.6(6) (1994).

57. *See infra* notes 228, 246 and accompanying text (discussing findings from Study III).

58. *See* BOSTON, *supra* note 30, at 73 (citing Robert Hisrich & Candida Brush, *Characteristics of the Minority Entrepreneur*, 24 J. SMALL BUS. MGMT. 1, 1-8 (1986)).

59. *See id.* (citing Oliver Clayton, *Planning a Career as a Business Owner*, 36 BUS. EDUC. F. 23-25, *reprinted in* D. RURADO & R. HODGETTS, ENTREPRENEURSHIP 40 (1992)); *infra* notes 104-05 (discussing research measures).

60. Sullivan & Cooper, *supra* note 41, at 4.

work well in small groups, enjoy creative freedom, and want to fully use their unique skills and knowledge.[61] Our study of Iowa entrepreneurs, admittedly a select and highly motivated sample, examines the extent to which disability plays a role in predicting potential business success. Our initial findings suggest that there is no obvious relationship between the type or severity of a participant's disability and that person's advancement through the EWD program and successful implementation of the business venture.[62] In that respect, we are exploring how *entrepreneurship transcends disability*.

1. Illustrative Prior Research

Prior employment studies using national survey data have, in large part, omitted analysis of the self-employment and entrepreneurial activities of persons with disabilities. One exception is Schur's analysis of 1997 data from the Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP). She examined the prevalence of independent contractors, contingent and part-time workers, and permanent full-time employees with and without disabilities.[63] Schur found that individuals with disabilities are more likely to be independent contractors than are those without disabilities (10.6% compared to 6.6% of sample, respectively).[64] For both persons with and without disabilities, nine out of ten independent contractors reported preferring to work in their own businesses as opposed to permanent or full-time jobs.[65] Although disability is not associated with a preference for working as an independent contractor—at least for Schur's sample of persons who presumably are self-employed and own their small businesses—more individuals with disabilities were self-employed.

Schur also examined the reasons why persons with and without disabilities choose to work as independent contractors. Compared to people without disabilities, independent contractors with disabilities are more likely to report that independent contracting is the only type of work that they could find, that independent work is preferable due to health limitations, and that they have "less hope" that independent work will lead to permanent employment.[66] These themes of increased

61. *Id.*

62. *See infra* notes 153-96 and accompanying text (describing findings of Study II).

63. *See* Schur, *supra* note 37, at 8 (describing CPS data analysis based on 32,954 employed workers, 1047 of whom reported a work disability, and SIPP data based on 11,129 observations for employees with disabilities).

64. *Id.* at tbl.1 (showing that the difference is statistically significant and citing a sample size of 116 persons with disabilities and 2190 persons without disabilities). The study also showed that workers with disabilities are more likely to be part-time and temporary workers, but less likely to be full-time permanent workers, compared to workers without disabilities. *Id. See also* Douglas L. Kruse & MaryAnne M. Hyland, Telecommuting and Other Home-Based Work: Differences by Disability Status (Dec. 1998) (unpublished manuscript, on file with authors) (discussing the advantages of home-based work for workers with disabilities). Kruse also finds that from 1991 to 1997 workers with disabilities have had higher rates of growth of home-based work, increasing from 9.2% to 15.1%, as compared to nondisabled workers, whose rates increased from 6.6% to 9.8%. *Id.* at 25.

65. Schur, *supra* note 37, at tbl.1.

66. *See id.* at tbl.2 (finding also that independent contractors with disabilities are more likely to report that they want to work in this capacity for longer periods of time). Other personal characteristics reported by Schur are relevant to this study. She found that independent contractors with and without disabilities are equally as likely to be male and female, white and African-American, from different regions of the country (except in the West), and married or not married. However, the contractors with disabilities were more likely to live alone, were older, and were less educated than their nondisabled

flexibility in self-employment and limited opportunities in traditional employment reflect incentives and disincentives for entrepreneurial and self-employment activities for individuals with disabilities. These are discussed in greater detail in Studies II and III below.

To facilitate self-employment opportunities, a number of researchers have explored strategies to enhance state VR counselors' experience, training, and expertise with self-employment.[67] Watson and Herkimer at the Center for Independent Living (CIL) in Berkeley, California, suggest that successful counselors are armed with an understanding of business planning, knowledge of community resources, the ability to coordinate financial and community resources, and the knowledge to coordinate Supplemental Security Income (SSI), Social Security Disability Insurance (SSDI), Medicare, Medicaid, and other assistance programs with participants' business plans.[68]

The factors identified by the Berkeley initiative have been supported by evidence from a study conducted by the Vermont Department of Vocational Rehabilitation. During the first three years of its program, 75% of the business start-ups in the Vermont Choice Project developed out of the two regions where VR counselors had self-employment experience and training.[69] The Vermont researchers concluded that state policies supporting self-employment and entrepreneurship for persons with disabilities must enhance counselors' understanding of disability and small business perspectives.[70] Vermont's approach reflects the view that self-employment is an important option for individuals with disabilities and may be evaluated in light of individual rehabilitation goals.[71] Self-employment is not por-

---

counterparts. *Id.* at tbl.3.

67. *See* Nancy L. Arnold & Tom Seekins, *Self-Employment as a Vocational Rehabilitation Closure*, 5 J. DISABILITY POL'Y STUD. 66-67 (1994) (surveying research on VR counselor attitudes).

68. *See* Larry Watson & Terry Herkimer, The Client Enhancement & Empowerment Project: Expanding Small Business and Self-Employment Opportunities 9-12 (unpublished manuscript, on file with authors). Professor Arnold and her colleagues have examined the role that Centers for Independent Living (CILS) play in supporting the continuum of employment activities for disabled persons. *See generally* RURAL INSTITUTE, *supra* note 8. *See also* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 23 (describing assessment instruments); NANCY ARNOLD, MONTANA RURAL INSTITUTE ON DISABILITIES, SELF-EMPLOYMENT IN VOCATIONAL REHABILITATION: BUILDING ON LESSONS FROM RURAL AMERICA (1996), *available at* http://ruralinstitute.umt.edu/rtcrural/Selem/Mongraph/ContentsSelEm.htm; Thomas P. Golden et al., *Plan for Achieving Self-Support: An Improved Tool for Self-Directed Vocational Rehabilitation*, 29 J. APPLIED REHABILITATION COUNSELING, Winter 1998, at 26, 29-30 (discussing starting a business under a Plan for Achieving Self Support program (PASS)); James R. Sheldon, Jr. & John S. Trach, *Social Security Disability Insurance and Supplemental Security Work Income Incentives with Recommendations for Policy Change*, 29 J. APPLIED REHABILITATION COUNSELING, Winter 1998, at 8 (discussing SSI and SSDI programs, SSI's PASS Program, and Impairment-Related Work Expenses (IRWEs)); THE ASSOCIATION OF PROGRAMS FOR RURAL INDEPENDENT LIVING (APRIL), TOPIC PAPER #1: RURAL SELF-EMPLOYMENT (Dec. 1998), *at* http://ruralinstitute. umt.edu/rtcrural/APRIL/APRILSelEm.htm (suggesting CILS involvement in employment services to include education, assessment, development of micro-loan funds and Small Business Development Centers (SBDC), as well as participation in economic development activities).

69. Michael Collins, The Option of Becoming Self-Employed: An Emerging Reality Within Vermont Vocational Rehabilitation 13 (1998) (unpublished draft, on file with authors).

70. *See id.* at 3-4 (outlining self-employment as a vocational employment option).

71. *Cf.* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 37 (discussing micro-enterprise approach to self-employment for persons with disabilities as a means for individuals to enter or reenter the workforce); *infra* notes 252-59 and accompanying text (arguing that disabled people's entrepreneurship also may be viewed as a micro-enterprise endeavor, independent of the traditional

BEST COPY AVAILABLE

trayed as an outcome of last resort, but a choice available as part of the spectrum of rehabilitation outcomes.

Ravesloot and Seekins studied VR counselors and self-employment outcomes from ten states.[72] They found that "ruralness" of the region and counselors' attitudes and experience were determinants of accessibility to, and success in, self-employment activities for persons with disabilities. Consistent with the conclusions of the Vermont study, Ravesloot and Seekins reported that VR counselors' experience and training with self-employment were among the most important predictors of successful outcomes.[73]

Other factors capable of study and critical to the success of self-employment initiatives are economic and quality of life outcomes for entrepreneurs with disabilities. Outcome measures may include sustainability of the business, gross and earned income, the provision of appropriate and affordable health benefits, integration into community activities, and reduction in governmental support.[74]

The Vermont Vocational Rehabilitation program is testing such standards for measuring self-employment outcomes.[75] Core economic indicators include whether the business has been sustained for 180 days without support from the state VR departments, whether the owner is investing money to support ongoing business expenses, and whether the owner is earning income at a living wage that has been sustained over time. Secondary economic indicators include whether the owner has experienced a decrease in public benefits, whether the owner is working at least twenty hours per week in the business, and whether work hours are dedicated to income-generating activity.[76]

Using such measures, the Vermont program describes several findings from cases tracked over a four-year period. Almost two-thirds of 113 participants were self-employed and generating income. Another quarter had written business plans.[77] Seventy-one of the businesses hired eighteen employees with disabilities and sixteen without disabilities.[78] The Vermont researchers note that a primary reason for using varying outcome measures is the difficulty in comparing standard economic stability indicators across traditional and self-employment settings.[79] The study conducted by the Berkeley Center for Independent Living similarly grappled with developing meaningful outcome measures.[80] The Berkeley group attempted to compare measures such as increasing business equity, take-home pay, decreasing

---

rehabilitation model).

72. *See* Craig Ravesloot & Tom Seekins, *Vocational Rehabilitation Counselors' Attitudes Toward Self-Employment Outcomes: Attitudes and their Effects on the Use of Self-Employment as an Employment Option*, 39 REHABILITATION COUNSELING BULL. 189 (1996); *infra* notes 137-41 and accompanying text (discussing research on VR counselor attitudes and case closure rates for self-employment).

73. *See* Sullivan & Cooper, *supra* note 41, at 2.

74. *Id.* at 10-11. Arnold and Seekins report that of forty-five states surveyed, eleven did not have a policy on self-employment, ten required its pursuit as a last resort, six states allowed it only for people with severe disabilities, three had positive policies, eleven pointed out negatives, and three quoted outdated rates of failure for small businesses. Arnold & Seekins, *supra* note 67, at 69.

75. Collins, *supra* note 69, at 9-11.

76. The Social Security Administration uses the twenty-hour figure as an indicator of significant business activity.

77. Collins, *supra* note 69, at 12.

78. *Id.*

79. *Id.* at 9.

80. Watson & Herkimer, *supra* note 68, at 9-12.

social service benefits, increasing personal capital and customers, new contracts, new hires, cash flow, and financial independence from governmental benefits.[81]

Researchers must continue to study successful and unsuccessful self-employment activities of persons with disabilities. This analysis is needed from the perspective of persons with disabilities, their families, and policymakers. It must use measures of economic growth, self-determination, quality of life, health, and other outcome factors. Study may reveal that the standards of success for traditional employment activities are not useful in assessment of self-employment. For instance, research may show that people who are successful in self-employment have higher VR rehabilitation costs initially, but that the long-term benefits outweigh those costs in areas such as quality of life, business sustainability, and economic impact.[82]

Any analysis of labor force participation or employment status of disabled individuals must use measures of disability that extend beyond a single "yes-no" indicator.[83] Oi describes four dimensions that are important in defining disability and individuals' labor supply decisions: (i) severity, (ii) age at onset of disability, (iii) anticipated duration of disability, and (iv) the disability's effect on expected length of life.[84] Although information about each of these aspects is not contained in existing national datasets, qualitative studies have asked individuals questions that may provide the basis for a composite measure of severity.[85] Research examining measures of severity and employment suggests that severity is, as may be expected, inversely related to the probability of working in traditional employment settings.[86] This relationship has not been examined in the self-employment context.[87] However, only by considering many aspects of individuals' disabilities may we assess the extent to which the public and private initiatives help or hinder the efforts of those with disabilities to move into, and stay in, the workplace in traditional and self-employment activities.[88]

---

81. *Id.*; *see also* Sullivan & Cooper, *supra* note 41, at 10-11,18-24 (showing charts of Arkansas and Washington state programs and projected costs of $10,000 and $3300 per participant). The costs for self-employment cases are between 10% and 20% higher than costs for traditional employment cases. *Id.* The actual costs averaged $6837 in Arkansas for the seventeen business start-ups and $3252 in Washington for twenty-three business start-ups. *Id.* Income figures or reduction in benefits are not identified in these studies.

82. *See infra* notes 231-32 and accompanying text (discussing the economic benefits of self-employment for persons with disabilities).

83. *Cf.* Frederick C. Collignon, *Is the ADA Successful? Indicators for Tracking Gains*, 549 ANNALS AM. ACAD. POL. & SOC. SCI. 129, 132-34 (1997) (describing methodological issues that arise when attempting to measure disability).

84. Walter Y. Oi, *Employment and Benefits for People with Diverse Disabilities*, *in* DISABILITY, WORK AND CASH BENEFITS 112-16 (Jerry L. Mashaw et al. eds., 1996).

85. The Survey of Income and Program Participation (SIPP) is one example. In the topical module that contains items regarding functional limitations, respondents indicate first whether the individual has difficulty with a sensory or physical functional activity and, if so, whether they can perform the activity at all. MCNEIL, 1991-92 SIPP STUDY, *supra* note 19, at 2.

86. *See* Pamela Loprest et al., *Gender, Disabilities, and Employment in the Health and Retirement Study*, 30 J. HUM. RESOURCES S293, S308-09 (1995) (finding that married women with severe disabilities had smaller reductions in their probabilities of working than men or single women with severe disabilities).

87. Schwochau & Blanck, *supra* note 2, at 298.

88. In addition, a number of studies have examined employment of disabled persons using information from years prior to the ADA's effective date. *See id.* at 302. Subsequent study may tailor empirical models to maximize comparability with earlier research and thereby allow for assessment of changes

BEST COPY AVAILABLE

In summary, the findings in the studies to date raise myriad questions. They also highlight that different research methods and analyses yield changes in the meaning of the findings. It is unlikely, of course, that one factor explains the pattern of results regarding the self-employment of persons with disabilities. It may well be that a combination of national, local, and private incentives and disincentives, as well as changes in the economy, explains the success rates of different self-employment strategies.[89] The next section begins the examination of such factors in the study of Iowa's EWD program.

III. IOWA'S ENTREPRENEURS WITH DISABILITIES: THREE EXPLORATORY STUDIES

A. OVERVIEW

The idea of a self-employment program targeted at people with disabilities originated with Iowa's Systems Change Congress, an annual gathering of consumers, family members, advocates, state policymakers and lawmakers, agency officials, and others. The Systems Change Congress assembles each year to review and draft legislation and policy initiatives. The goal is to obtain sponsorship of bills to be considered by the Iowa General Assembly.

The Systems Change Congress recommended legislation to create the Entrepreneurs with Disabilities (EWD) program to provide technical assistance, business development grants, and financial assistance to qualified Iowans. The legislation that authorized the EWD program and funding was enacted in 1994. The statute reads, in part:

> ENTREPRENEURS WITH DISABILITIES. [T]he moneys appropriated for small business programs . . . shall be used to match federal funds to design and implement a business development initiative for entrepreneurs with disabilities. The business development division shall develop a program to provide technical and financial assistance to help persons with disabilities to become self-sufficient and create additional employment opportunities by establishing or expanding small business ventures. The division shall enter into an interagency agreement with the division of vocational rehabilitation of the department of education to implement the program. The purpose of the interagency agreement is to strengthen initial placements and long-term successes of individuals with disabilities through self-employment, by combining the business expertise of the department of economic development with the experience of the division of vocational rehabilitation of the department of education in working with people with disabilities.[90]

Although the law provided a blueprint for the program, structural details and

---

between pre-ADA and post-ADA periods. This approach would allow identification of changes in factors previously found to influence self-employment of individuals with disabilities, such as personal background characteristics, rural or urban nature of the community, and education and training services. *See* RURAL INSTITUTE, *supra* note 8 (discussing self-employment in rural America).

89. *See* Arnold & Seekins, *supra* note 67, at 70-71 (finding great variability across state VR programs using self-employment as a VR case closure strategy).

90. 1994 Iowa Acts 1076. The EWD legislation also states that "[t]he business development division shall design the program to make the maximum amount of resources expended by the business development of the department of economic development eligible for federal reimbursement." *Id.*

guidelines were crafted later by agency officials using the administrative rulemaking process. This approach allowed for the partnering of several Iowa state agencies to maintain flexibility in maximizing the services available to consumers. It also allowed use of local service delivery systems to support the mission of the statewide mandate.

The EWD program was established as a partnership among the Iowa Department of Economic Development (IDED), the Iowa Department of Education's Division of Vocational Rehabilitation Services (DVRS), and the Iowa Department for the Blind (IDB).[91] This investigation examines the EWD program and a sample of its participants from May 1995, the date the program received its first application, until August 1, 1999.[92] Funding for the EWD program has ranged from approximately $500,000 to $700,000 per year. Approximately 20% of the budget is used for operating costs. The remaining 80% is used to furnish technical and financial assistance to the participants.[93] State funds from the Department of Economic Development are appropriated to match federal Vocational Rehabilitation funds under Title I of the Rehabilitation Act of 1973.

This part describes three initial investigations of the EWD program: Study I—Organizational Analysis of the EWD Program; Study II—Demographic Analysis of EWD Program Applicants; and Study III—Interviews with EWD Participants. The studies present a preliminary portrait of the EWD program, along with the testing of various methodologies including qualitative research techniques, archival data sources, and interview and observation techniques.

Study I provides an organizational overview of Iowa's EWD Program. It examines the public-private partnership approach used by the program. Study II begins the description of the typical EWD applicant—an unemployed, forty-six-year-old, married, Caucasian male, with a high school education and a noncongenital orthopedic or mental (affective) disorder, who receives some form of private or governmental assistance or has been supported by family and friends. Study II paints a portrait of entrepreneurs at the time they applied to the EWD program, using factors such as applicants' age, gender, education, source of support, disability, and prior earnings and hours worked. To create this initial profile of EWD applicants, we reviewed all applications and tracked these applicants as they advanced through the program, including their progress through technical assistance, financial assistance, and case closure.

Study III describes thirty-seven program participants in terms of their business success, quality of life, knowledge of laws and policies affecting persons with disabilities, and the barriers they face in everyday life. Thirty-seven of the 112 program participants were selected to represent a range of disability type and business activity.

---

91. The interagency memoranda of agreement and amendments are on file with the authors [hereinafter Memoranda]. From August 1, 1999 to September 30, 2000, the LHP&DC at the University of Iowa College of Law participated as a fourth partner.

92. The present study is limited to data before the LHP&DC became a partner. Interviews with Program Staff, VR personnel, and participants, as well as data analysis, however, continued after the partnership was established.

93. *See* Memoranda, *supra* note 91 (detailing budget breakout on an annual basis). Specific budget information is not included in this Article because it includes detailed salary and benefit information for program personnel.

Initial Steps in the Research Process. After establishing contact with the EWD program staff and conducting an initial interview about the scope of the investigation, the project began the pilot-testing phase. The purpose of the research was discussed with the EWD program manager and with state administrators in IDED, DVRS, and IDB. The goals and benefits of the study were examined with regard to program and state staff, potential participants, and other programs in Iowa and other states.[94]

Repeated interaction among research team members and program staff helped to ensure the working rapport needed to complete the project. From these discussions, research design and data development were improved, including the formatting of aggregate statistics and incorporation of feedback from participants. In qualitative field research of this sort, this collaboration is crucial. Without compromising the quality of the information collected, the approach enabled the researchers to check and correct information and to clarify interpretation of data sources with the program manager.[95] Nevertheless, notes from interviews were kept in secure files, separated from program data sources. Where possible, research notes were detailed in the aggregate to help ensure participant confidentiality.

B. Study I: Organizational Analysis of EWD Program

Overview of Approach. Investigation of Iowa's EWD program was approached through an exploratory field research model.[96] A variety of research methods were tested as detailed in Studies I, II, and III below. The overriding purpose of Study I was twofold: to gain an in-depth understanding of the program and to understand the state systems within which the program operates that help disabled participants apply to the program, evaluate their business concepts and plans, receive financial and consulting assistance in starting, expanding, or acquiring a business, and attain case closure by becoming economically self-sufficient.

Study I uses a range of information sources, including collection of data about the professional characteristics of the program staff. On the public side, we examined how program information is collected from applicants and participants. We further analyzed issues related to entry and referral, examined the coordination among participating Iowa state agencies, and compared the consulting and financial services available to the program participants.[97] On the private side, we examined information about program consultants and program interaction with private sector organizations, such as bank lending programs, lawyers, and accountants. Although

---

94. While the present research was in its early stages, the State and the LHP&DC entered into an agreement to collaborate on research of the EWD program. To avoid a potential conflict in the conducting and reporting of the research, the study was limited to review of information during the period prior to the collaboration between the State and the research center.

95. All parties agreed that drafts of the research report would be shared with the state program officials and participants prior to publication. This was done to allow a check for errors or misstatements, not as a veto of information derived. It also provided a basis of information for follow-up study.

96. For a review of this method, see Peter D. Blanck & Arthur N. Turner, *Gestalt Research: Clinical-Field-Research Approaches to Studying Organizations*, *in* HANDBOOK OF ORGANIZATIONAL BEHAVIOR 109-25 (Jay W. Lorsch ed., 1987).

97. *See* ROSEANNE HERZOG, UNLIKELY ENTREPRENEURS: A COMPLETE GUIDE TO BUSINESS START-UPS FOR PEOPLE WITH DISABILITIES AND CHRONIC HEALTH CONDITIONS (1998) (describing steps in self-employment process); Arnold & Seekins, *supra* note 67, at 75-79 (outlining components of a comprehensive self-employment policy using a similar approach).

one long-term goal of the investigation is to help model business success for entrepreneurs with disabilities in this "public-private" partnership approach, additional study is required using larger samples and control groups.[98]

Prior to beginning Study I, the research team conducted an independent review of EWD program operations. Program requirements were reviewed for coordination among the state departments (EWD, DVRS, IDB, IDED) and with social security programs and work incentive programs. This review included analysis of the legislative history of the EWD program, its regulations in the Administrative Code of Iowa, and the DVRS and IDB regulations. Researchers reviewed federal law and policy (e.g., WIA and ADA) to determine its probable impact on the program and its participants. Reports of government agencies and advocacy groups were reviewed to generate hypotheses and methods of study. The research of Arnold and her colleagues provided a useful framework for the organizational analysis used in Study I.[99]

Application and Admission Process. The EWD program serves Iowans that are IDB or DVRS clients. To be eligible, program applicants must intend to establish, expand, or maintain a small business in Iowa.[100] The business must be owned and operated by an individual with a disability who maintains at least 51% control over the business, and the business must be a legal, for-profit venture. Figure 1 illustrates the process by which persons with disabilities apply to and proceed through the public-private components of the EWD program.

98. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 3 (discussing public and private commitment to self-employment and entrepreneurs with disabilities).

99. *See* Arnold & Seekins, *supra* note 67, at 77-79 (identifying the steps that consumer and VR counselors should take in pursuing self-employment closure, including: assess business potential, develop a business idea and analyze feasibility, obtain education and training, obtain technical assistance, develop a business plan, apply for financial resources, submit plan to state agency review, and follow up and review).

100. The operational structure of the EWD program tracks the process and procedure set out in its governing administrative rules. *See supra* note 90 and accompanying text (describing the role of Iowa's Business Development Division and the Division of Vocational Rehabilitation).

Applications are submitted to the EWD program staff after a DVRS or IDB counselor determines that the client's rehabilitation goals may be met through this entrepreneurial initiative.[101] The application materials explain the program terminology and evaluation standards. They also include questions probing the entrepreneur's proposed business, target market, and financial information and seek to determine the applicant's projected needs for technical and financial assistance.[102]

The application involves a series of questions designed to assess the participant's business knowledge, plans, and sophistication. It is available in audio and Braille formats from the EWD program staff and the IDB or the DVRS.[103] The counselor and the client typically work together to prepare the application. The counselor also submits a referral letter with the application, detailing the counselor's evaluation of the individual's potential for self-employment success, including consideration of the client's disabling condition.[104] The counselor's referral letter includes any of the client's assistive needs. The counselor submits the application to the EWD program manager on behalf of the client.[105]

Application information is used to profile the applicant's experience and business knowledge.[106] To be accepted to the EWD program, the applicant must be qualified and have the requisite business credentials. For example, a hairdresser must be licensed or able to obtain a license, an auto mechanic must know how to fix cars, and a caterer must be able to cook. Although the applicant must have the necessary business credentials, technical assistance provided by the EWD program may enable applicants to learn management skills, including accounting, bookkeeping, tax payment procedures, and financial management. The evaluation process summarized below enables program staff to assess the capabilities and needs of the potential entrepreneur.

As mentioned, EWD applicants must have a desire to be self-sufficient and have the requisite education, business training, and financial resources to match financial assistance provided by the program.[107] An applicant's evaluation is based on a scoring system set out in IDED regulations and in the EWD application.[108]

---

101. *See* IOWA ADMIN. CODE r. 261-56.4(15) (1997) (describing the application procedure). Application materials for the program are available from the Division of Vocational Rehabilitation Services, Iowa Department for the Blind, and Iowa Department of Economic Development. Applications will be forwarded to the IDED program manager for review and scored to determine program eligibility. Business plans are scored to determine eligibility for a financial assistance grant, and approval of a technical assistance grant is based upon acceptance of a project plan, budget, and uses statement form. *Id.*

102. *See* IOWA ADMIN. CODE r. 261-56.2 (1997) (setting forth definitions).

103. When a participant's disability requires accommodation in the application or evaluation process, it is typically provided through the DVRS counselor. *Cf.* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 28-29 (recommending that business planning materials be available in alternative formats).

104. Many DVRS counselors use assessment instruments to evaluate an applicant's potential for self-employment. The Iowa DVRS is researching the validity and reliability of a new instrument, the Measure of Self-Employment Potential (MSEP). *See* C/S VOCATIONAL CONSULTANTS, MEASURE OF SELF-EMPLOYMENT POTENTIAL (MSEP) (1998) (on file with the Iowa Law Review).

105. Applications from DVRS, in contrast to applicants from IDB, also may include a measure of self-employment potential with the application.

106. The application process typically takes thirty days to complete.

107. This match may include the means to purchase necessary business equipment or the ability to match allotted funds with "sweat equity" (e.g., the labor of a carpenter or painter will be accepted as a match for EWD funds).

108. *See* IOWA ADMIN. CODE r. 261-56.4(4) (1997) (providing that applications for the EWD pro-

BEST COPY AVAILABLE

The evaluation includes assessments such as:

> 1. Does the applicant have the requisite education, skills, and work experience?
>
> 2. Does the applicant have management or accounting experience?
>
> 3. Is the applicant clear as to the nature of the proposed business?
>
> 4. Does the applicant have an understanding of marketing and estimating sales potential?
>
> 5. Does the applicant have knowledge of products, services, and location?
>
> 6. Does the applicant have the capital requirements for business start-up, expansion, or acquisition?
>
> 7. Does the applicant's past credit history demonstrate responsible behavior?[109]

In addition to the application, EWD staff interview the client before deciding whether to accept the applicant. EWD staff meet with the applicant and the vocational counselor to review the application, discuss the client's degree of experience and technical expertise relevant to the proposed venture, and evaluate the business idea. If an applicant is accepted, she is informed of acceptance into the EWD program at this meeting, and the EWD staff and applicant begin plans for the applicant's technical assistance needs. IDB and DVRS counselors continue to assist the client with necessary support services, such as the procurement of assistive technology, accessible transportation, education and training, and, when appropriate, medical evaluation and counseling.[110]

The program is designed to help applicants that are accepted, as well as suggest alternative approaches to those who do not qualify. If an individual is not accepted to the EWD program, she may be referred to the Iowa DVRS's "First-Step Program."[111] This program targets people with disabilities who do not seek complete economic self-sufficiency or when the scope of the proposed business is too small to provide self-sufficiency. If the applicant does not have sufficient knowledge about business or the proposed venture, she typically is referred for additional vocational counseling.[112] Successful applicants, referred to as clients, begin work-

---

gram will be evaluated using a 100-point system, based on preset criteria).

109. *Id.* (including assessment of unpaid income tax, delinquent child support obligations, and defaulted student loans).

110. *Cf.* Allison Greiner Redick et al., *Consumer Empowerment Through Occupational Therapy: The Americans with Disabilities Act Title III*, 54 AM. J. OCCUPATIONAL THERAPY 207, 207-13 (2000) (finding that occupational counselors were not sufficiently knowledgeable about implementing ADA provisions).

111. Only DVRS clients are referred to the First-Step Program. IDB does not have a separate program for their clients.

112. Since the completion of this research project, applicants without sufficient knowledge about business may be referred to Iowa's Business Assistance Services for Entrepreneurs (BASE) program. BASE is a program, funded by the IDED, at the Iowa LHP&DC. The program provides training and a regional resource guide for entrepreneurs. For background information, see the BASE website at

ing with program staff to identify necessary technical assistance for the development of their business ventures. Technical assistance is provided to clients in two consecutive phases: feasibility study and specialized technical assistance.

Technical Assistance—Feasibility Study. The feasibility study involves a period of assessment. A consultant, selected by the client, examines the feasibility of the business venture. Feasibility studies involve concept, market, and financial assessments. The concept assessment reviews the business idea and the participant's background, technical experience, and management capabilities.[113] The market study examines the degree of competition within the proposed geographic and demographic markets and provides information regarding intended customer groups.[114] The financial assessment determines the business's capital needs and the applicant's resources.[115]

Participants also must demonstrate the ability to start and operate the proposed business. The feasibility analysis considers the nature of the participant's disability—for instance, the degree to which a participant's chronic back problem may limit her ability to operate the business.[116]

The feasibility analysis also considers geographic limitations of the proposed venture. A proposed specialty store in the participant's hometown, for instance, may not be feasible from a business perspective due to competitive disadvantage. The participant may be able to open the store in an adjoining city, however, because of different market conditions and accessible public transportation schedules.[117] Similarly, consideration of financial limitations might indicate that a business with high start-up costs (e.g., costs of specialized equipment) may not be feasible for an entrepreneur with limited income or credit support.[118]

The applicant must demonstrate plans for adequate financial capitalization. The EWD program requires that at least half of the needed capital be contributed by the entrepreneur in the form of assets owned by the entrepreneur, "sweat equity," or business loans from banks, friends, or family. In one case, a participant provided sweat equity carpentry work that otherwise would have been purchased from a third party vendor. In another case, the entrepreneur provided the computer equipment to perform design work in a desktop publishing venture.[119] DVRS clients who are accepted to the EWD program undergo a financial participation assessment to determine the percentage of funding the DVRS and the participant will share.[120] The financial assessment measures the participant's income, resources,

---

http://www.baseiowa.org. *See also* PRESIDENT'S COMMITTEE, *supra* note 6 (discussing project activities, including training with the Small Business Administration and other federal agencies through workshops around the country for disabled entrepreneurs).

113. *See* EWD Disability Program Feasibility Study Notes (Apr. 10, 1999) (unpublished notes based on review of program handout, on file with authors).

114. *See id.*

115. *See id.*; P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 23 (reviewing feasibility study).

116. Interviews with Program Manager, *supra* note 36.

117. *Id.*

118. *Id.*

119. *Id.*

120. All applicants must fill out a standard form. *See* DVRS Form R-406A, Financial Inventory for Assessment of Economic Need (on file with authors); DVRS Form R-406B, Determination of Financial Participation for Services Based on Economic Need (on file with authors).

and family status to determine the public-private share of costs for the business start-up.

To proceed to the next stage, program implementation, the proposed venture must satisfy the feasibility study standards. If the study supports that the business venture is feasible, EWD staff schedule a meeting or telephone conference with the client, the counselor, and the consultant to inform them of the results of the study and to begin the next phase of technical assistance. If the business is not feasible, a personal interview is scheduled with the EWD program manager, the client, the counselor, and the consultant to discuss the results of the study and possible next steps.

Technical Assistance—Specialized. EWD participants receive specialized technical assistance from private consultants. These consultants are considered by program staff to be the linchpin of the program.[121] Consulting includes business plan development, accounting services, legal services, or other services focused on business planning or management.[122] Consultants also provide ongoing monitoring services once the client has engaged in the business venture. However, technical assistance expenditures available to EWD clients may not exceed $10,000 throughout the client's participation in the program.[123]

Consultants work with EWD participants as they would with any small business participant.[124] Attorneys are employed to review contracts and leases and provide intellectual property services, such as patenting the items to be manufactured. Accountants develop financial management systems. Graphic designers create logos and letterhead. The EWD program maintains a list of consultants who are qualified to provide services.[125] EWD consultants attend quarterly "best practices" seminars that address business practices, entrepreneurship, business consulting, interacting with state programs, and sensitivity to disability issues.[126]

Developing a business plan is an essential aspect of EWD program participation. Preparing the plan is the responsibility of the client, facilitated by a business consultant. Virtually all lenders (public and private) require business plans for the lending process. The business plan serves as a risk analysis tool, a business road map, and an information and marketing source for lenders and others who evaluate the business proposal.[127] Risk analysis includes information on the market, competition, and sales potential and evaluation of potential business success. The business

121. *See* IOWA ADMIN. CODE r. 261-56.5(1)-(6) (1997) (detailing technical assistance grants, application process, project plan and budget approval process, selection of qualified business consultants, and case management by IDED).

122. The goal of the consulting is to enable participants to pursue these skills on their own.

123. The EWD participant's project plan requires the documentation of the business planning process, retention of consultants, budgetary guidelines, and a time line. The project plan and budget form must be signed by the applicant and approved by the IDED and DVRS or IDB program managers. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 16 (reviewing business planning process and providing resource list).

124. Interviews with Program Staff, *supra* note 36.

125. Interviews with Program Manager, *supra* note 36.

126. *Id.* The Program Manager explained that consultants are selected, in part, on their participation in "best practices" seminars and their commitment to the participants. *See also* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 21-22 (providing a sample course outline for DVRS staff).

127. ENTREPRENEURS WITH DISABILITIES PROGRAM, COUNSELOR'S HANDBOOK 28 (on file with authors).

road map assists participants in defining the steps necessary for implementation.

Consultants facilitate financial research, including information about potential lenders, customers, product benefits, sales and distribution, competition, pricing, budgets, and market strategies.[128] The amount or type of consulting and technical assistance provided to an EWD participant is tailored to the needs of the individual. In cases where a participant has developed a business plan, there may not be a need to hire a consultant for the business start-up process. For a pre-existing or expanding business, often there are no requirements for licensing or zoning expertise, or for contracting or patenting services that may require consulting attorneys.

Financial Assistance Review and Funding Strategies. The EWD "financial assistance review" assesses the needs for and sources of funding necessary to capitalize the business and ensures that the client has sufficient start-up funds to operate the business until it becomes self-sustaining. This review involves a meeting with the EWD participant, the DVRS counselor, consultants, and the EWD Program Manager. The entrepreneur presents the business plan to the group to demonstrate work accomplished. The EWD Program Manager then decides whether to fund the business, deny funding, or proceed with further technical assistance.

Funding to entrepreneurs with disabilities is available from a variety of sources. Iowa has two state funded loan programs, the Targeted Small Business (TSB) program and the Self-Employment Loan Program (SELP).[129] In addition, the EWD program provides seed grants for financial assistance.

A goal of the EWD program is to help participants secure financing from commercial or private sources.[130] The EWD program emphasizes the public-private partnership approach to small business by providing seed grants that clients may use to gain access to private funds.[131] To enhance the prospect of success in obtaining private funds, the EWD program places emphasis on creating a business plan that documents the uses and sources of funds and the equipment or sweat equity needed for the business to be successful. By helping participants prepare a compelling business plan and providing seed grants, the program also prepares participants to compete favorably for TSB and SELP loans.

EWD seed money may provide up to 50% of working capital costs for start-up, acquisition, or expansion.[132] Participants must contribute the remaining amounts, typically through bank loans, personal or family resources, or Social Security Work Incentives payments.[133] The EWD program has a technical assistance

128. DAVID H. BANGS, JR., THE BUSINESS PLANNING GUIDE 24-36 (8th ed. 1998) (providing examples of elements in business plans used by EWD participants).

129. TSB and SELP are competitive loan programs for which loan determination is based on the quality of the loan application and the business plan.

130. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 6 (noting that female small business owners are more likely to rely on nontraditional sources of capital than their male counterparts).

131. *See* IOWA ADMIN. CODE r. 261-56.6(1) (1997) (providing that public financial assistance, or seed grants, may be awarded for up to fifty percent (not to exceed $10,000) of the working capital needed to start, expand, or acquire a business).

132. *Id.* Working capital may be used for, but is not limited to, the design and printing of marketing materials, advertising, rent (up to six months), postage, materials, inventory, and insurance. *Id.*

133. *See* IOWA ADMIN. CODE r. 261-56.6(1)-(4) (1997) (providing grant eligibility criteria, describing approval of sources and uses form, awards process, and stating that contracts detailing financial assistance grants are the responsibility of the DVRS or IDB and must be consistent with the use of Title I vocational rehabilitation funds).

limit, including financial assistance, of $10,000 per participant. In special cases when extraordinary capitalization was necessary for a business expansion, the $10,000 limit has been waived.[134]

Start-up funds typically are paid directly from the state DVRS or IDB departments to the subcontracted merchants or vendors involved with the business start-up.[135] Because some vendors are reluctant to sell directly to the state on behalf of the client, an alternative arrangement called "bridge lending" is arranged with a commercial lender. In bridge lending, the Program Manager and participant arrange a bank loan to be disbursed to the participant and then repaid from program financial assistance. The interest payments remain the responsibility of the entrepreneur.

Bridge loans sometimes concern participants who believe that EWD technical assistance funds should be disbursed directly to them, thereby avoiding additional loans and interest payments.[136] Persons with disabilities who choose self-employment to enhance their sense of self-control view EWD financial procedures as a constraint on their independence. Nevertheless, there are no exceptions to the EWD financing procedures. Funds proceed directly to the participant only for purposes of reimbursement.

"Follow Along Monitoring" and Case Closure. The entrepreneur must continue communications with the EWD Program Staff after their business is operational. "Follow along monitoring," as the term is used, requires the participant to provide financial information to the EWD program for up to two years *as a condition of* receiving financial assistance. In the past, state DVRS staff conducted follow along monitoring, but now EWD staff and consultants conduct monthly monitoring.[137] The monthly monitoring enables participants' business and rehabilitation needs to be addressed in a timely fashion so that appropriate technical and financial assistance may be provided.[138] EWD participants are monitored for a period of two years from business start-up to or until financial self-sufficiency.[139]

When a participant's business demonstrates profitability or a trend towards profitability the file is evaluated for "closure."[140] A business is "successful" according to DVRS if it has received financial assistance, remains in stable operation,

---

134. Interviews with Program Manager, *supra* note 36.

135. *Id.*

136. Interviews with Program Staff, *supra* note 36.

137. Interviews with Program Manager, *supra* note 36. The Program Manager also noted that consultant costs are charged to participants' technical assistance budget. *Id. See* IOWA ADMIN. CODE r. 261-56.7(15) (1997) (providing that participants must agree to engage in the monitoring program). Tracking information is gathered through telephone conversations, letter and document exchanges, and onsite visits to the business. Interviews with Program Manager, *supra* note 36.

138. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 26 (discussing the EWD monitoring process).

139. *See id.* (discussing EWD monitoring and noting that this policy differs from traditional rehabilitation which recommends case closure within three to four months of successful placement in competitive employment). Other states, such as Ohio and New York, contract with Small Business Development Centers (SBDCs) to provide ongoing technical assistance to entrepreneurs with disabilities. *Id.*

140. Closure requirements are derived from monitoring documents reviewed for this study and interviews with the Program Manager. Closure requirements are not set out in the enabling legislation or in the Iowa Administrative Code. DVRS closure criteria differ from EWD program closure criteria. Files are successfully closed with the EWD program when the client demonstrates profitability or is moving towards profitability. DVRS requires that the client has received financial assistance, the business is in stable operation, and it has shown a trend toward profitability.

and shows a trend towards profitability. Of the 112 EWD sponsored businesses that started operations during the period May 1, 1995, through August 1, 1999, forty-two (37.5% of applicants who received financial assistance) have closed successfully according to DVRS standards.[141] It should be noted that DVRS standards are only one possible definition of successful business outcomes. Future study needs to define and assess other reliable and valid measures of self-employment and micro-enterprise business success. These measures may include economic indicators of business viability such as growth in earned income, profits reported on IRS Schedule C Forms, capital investments, or business annual reports. They also may assess quality of life, health status, and self-determination indicators of entrepreneurs. To stimulate the development of these assessments, Study II examines the characteristics of those applying to the EWD program and of those attaining case closure.

Summary and Issues Left Unresolved by Study I. Study I suggests that there are aspects of the EWD program that warrant further study. Comparative analysis must examine, for instance, the relationship among public-private initiatives for disabled persons seeking training in self-employment (e.g., with the staffing industry[142]) and programs supporting health care and insurance (e.g., "Medicaid Buy-In" programs).[143] For many people with disabilities, self-employment is a route to adequate health insurance and care; for others adequate health care is a route to self-employment.[144]

Another area worthy of study is analysis of the mechanisms by which the EWD public-private partnership protects participants' privacy interests in the knowledge of their disabilities. Participants perceive this element as crucial to avoid discrimination and bias toward their ventures.[145] For this reason, EWD staff and DVRS counselors do not disclose a participant's disability to private consultants or lending institutions.[146] Where appropriate, the participant's DVRS coun-

---

141. Interviews with Program Staff, *supra* note 36. The staff derives its data from DVRS. It explains that files are closed as unsuccessful when the business has failed, the participant decides not to pursue business ownership, feasibility studies demonstrate a likelihood that the business will not succeed, or required materials are not complete or accurate.

142. *See generally* PETER DAVID BLANCK & PATRICK STEELE, IOWA LAW, HEALTH POLICY & DISABILITY CENTER, THE EMERGING ROLE OF THE STAFFING INDUSTRY IN THE EMPLOYMENT OF PERSONS WITH DISABILITIES—A CASE REPORT ON MANPOWER INC. (1998) (discussing how Manpower Inc. creates and maintains employment opportunities for those with disabilities).

143. *See generally* ALLEN JENSEN & ROBERT SILVERSTEIN, POLICY BRIEF: IMPROVEMENTS TO THE SSDI AND SSI WORK INCENTIVES AND EXPANDED AVAILABILITY OF HEALTH CARE SERVICES TO WORKERS WITH DISABILITIES UNDER THE TICKET TO WORK AND WORK INCENTIVES IMPROVEMENT ACT OF 1999 (2000) [hereinafter JENSEN & SILVERSTEIN, POLICY BRIEF] (discussing the policy background). States may choose not to participate in the Buy-In program. *Cf.* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 47 (recommending implementation of Medicaid Buy-In in all fifty states).

144. *See generally* JENSEN & SILVERSTEIN, POLICY BRIEF, *supra* note 143.

145. Preventing discrimination by lenders or vendors is a primary concern. Because the DVRS or IDB counselor refers individuals to the EWD program and assists them through the process, disability information is included where necessary for the application process or interaction with the Program Staff. A DVRS counselor is present when the EWD staff or consultants meet with the participant so the participant's privacy can be respected. The disability need not be, and, as our findings suggest, is not, the primary focus for the EWD program determinations. Interviews with Program Manager, *supra* note 36.

146. The EWD staff answers questions from lenders concerning a participant's disability by explaining that the individual is an EWD participant. Interview with Program Manager, *supra* note 36. A rehabilitation counselor is present when the EWD staff or consultants meet with the participant. Typi-

BEST COPY AVAILABLE

selor has access to documentation to assist with plans for work-related accommodations.[147] Although a participant's disability may affect the details of the business plan or activities, a core value of the EWD program is that a participant maintains the discretion to determine whether or not to disclose her disability.

C. STUDY II: DEMOGRAPHIC ANALYSIS OF EWD APPLICANTS

The primary goal of Study II was to develop a profile of applicants to the EWD program. We began by exploring several research questions, some of which will be assessed in follow-up studies. These include:

1. What are the characteristics of applicants to Iowa's EWD program, and what motivates them to opt for self-employment? How is this group of self-selecting Iowans different than other Iowans with and without disabilities?

2. Is there a relation between the severity or type of disability and other personal and economic characteristics of EWD applicants?

3. What are the economic and employment backgrounds of applicants to the EWD program? And, what can we learn about the characteristics of EWD applicants that will assist in the assessment of successful employment outcomes?

4. To what extent are EWD applicants receiving federal and state support for workforce development activities?

5. What types of entrepreneurial activities are of interest to EWD applicants?

Overview of Approach. Study II focuses on existing demographic data sources on program applicants and information regarding their interactions with the Program Staff, consultants, and lenders at various stages of the application process.[148] The study examines all 509 EWD applicants from May 1995 until August 1, 1999.[149] The review of this data was conducted as a qualitative snap-shot of the applicants. In-depth interviews of a sub-sample of participants follow in Study III.[150]

---

cally the individual's privacy is respected, and the disability is not the focus of discussion. *Id.*

147. In the intake process for the DVRS program, the counselor requests information related to the applicant's disability and accommodation needs. This approach is consistent with the ADA's "interactive process" for requesting workplace accommodations. *Id.*

148. *See supra* notes 96-147 and accompanying text (presenting Study I and Figure 1 which describe the stages of the application and the program process). Statistical information for Appendix I and this study was derived from the DVRS database and contains information collected at the time of application for DVRS services. The data employed for Study II have several limitations with regard to their generalizability that may be addressed in future research. For instance, the data are derived from self-reported measures coded into the Iowa DVRS database.

149. The EWD Program Staff received its first application in May 1995.

150. To ensure the confidentiality of the data contained in the DVRS program MIS file, identifying information was removed and redacted. A release and consent form was used with participants interviewed in Study III. After beginning the research, it was necessary to have certain identifiers to link data sources to complete information in Study III. The state DVRS determined that identifiable information could be provided per 34 C.F.R. § 361.38(d)(1)-(5), (i)-(s). However, no identifiable information derived from the interviews was disclosed to the EWD staff. When data was missing from the aggregate data file, the research team interviewed the Program Manager to complete the data set in ways that

To begin to address the research questions listed above, the data are organized in Appendix I and discussed in five general categories:[151]

1. background measures;

2. disability measures;

3. prior employment and economic measures;

4. prior public and private assistance measures; and

5. proposed self-employment measures.

These five categories were assessed for subsets of applicants as they progressed through the EWD application process. Data were gathered at the initial DVRS application, when the participant received any services—including any financial services—and when the participant's file was closed successfully.[152]

Background Measures. Personal background measures refer to the applicants' gender, age, race, marital status, and education. Sixty-seven percent of EWD applicants were men and 33% were women. Figure 2 illustrates that as applicants progressed through the program, women were less likely than men to be successful in receiving services, financial assistance, and case closure. Although approximately one third of the applicants are women, less than one quarter of these applicants (21%) achieved DVRS's standard for successful case closure.

ensured participant confidentiality (e.g., without disclosing participant identity).

151. *See infra* Appendix I (presenting a master table displaying the five general categories).

152. *See infra* Appendix I (showing that some participants never used services, some received the initial program orientation but no other services, and some received orientation services, consulting, and financial assistance (as described in Study I above)).

These trends comport with national studies suggesting that women are less likely to be represented in the labor force for a variety of reasons, including the fact that women are significantly more likely to bear child-care responsibilities.[153] However, as Study III illustrates, self-employment has been a means of entry or re-entry into the labor force for a growing number of women with disabilities, particularly because of their ability to work flexible hours. Further study must address the barriers and opportunities that women with disabilities face regarding labor force participation, as well as the reasons for their increasing involvement in self-employment and entrepreneurial activities.

EWD applicants were usually in their mid-forties, with a mean age of forty-six, and ranged in age from twenty-one to sixty-nine years old. Roughly half were married (52%), with one quarter divorced or separated (25%), and less than a fifth (18%) never married. Consistent with Iowa demographics, the majority of EWD applicants were white (96%), with a small minority representation (4%).[154] The data in Appendix I also indicate that EWD participants progressing through the various stages of the program are representative of the applicant pool in terms of their age and ethnicity.

Other studies have examined the relationship of gender, race, and disability to workforce participation, economic opportunity, and career advancement. Little is known, however, about how these factors relate to self-employment.[155] Hanna and Rogovsky and their colleagues analyzed the 1984 Census Bureau survey on health and disability, conducted interviews with women with physical disabilities, and gathered information from a 1988 questionnaire on attitudes toward people with disabilities. These researchers found, for instance, that 25% of black women with disabilities were employed full time, as compared to 77% of white men with disabilities, 44% of white women with disabilities, and 57% of black men with disabilities.[156]

Further study must seek to determine if self-employment affects income growth rates for women, minorities, and other groups with disabilities.[157] Re-

153. *See supra* note 16 and accompanying text (describing the CPS study findings). In addition, women are more likely than men to have psychiatric impairments. *Id.*

154. EWD demographics for minority applicants are 3% African-American, 1% American Indian, and 0.6 % Asian or Pacific Islander. *See infra* Appendix I. African-Americans account for roughly 4% and individuals of Hispanic origin account for 1% of Iowa's DVRS clientele. *See* IOWA STATE PLAN FOR THE STATE VOCATIONAL REHABILITATION SERVICES PROGRAM AND STATE PLAN SUPPLEMENT FOR THE STATE SUPPORTED EMPLOYMENT SERVICES PROGRAM FY 1998-2000 (on file with the Iowa Law Review) (providing data in Attachment 7.6 on Minority Outreach and DVRS closures).

155. *Cf.* DISABILITY RIGHTS ADVOCATES, ADA WATCH 1999, at 5 (noting that minorities with disabilities are significantly underreached by disability technical assistance efforts).

156. *See generally* William J. Hanna & Elizabeth Rogovsky, *On the Situation of African-American Women With Physical Disabilities*, 23 J. APPLIED REHABILITATION COUNSELING 39 (1992); Daniel J. Reschly & Susan M. Ward, *Use of Adaptive Behavior Measures and Overrepresentation of Black Students in Programs for Students with Mild Mental Retardation*, 96 AM. J. MENTAL RETARDATION 257, 257 (1991) (summarizing studies showing overrepresentation of minority students in special education classes versus mainstreamed classrooms).

157. *See* BLANCK, EMERGING WORKFORCE, *supra* note 23, at 89 (stating that African-American women with disabilities are disproportionately disadvantaged in employment opportunities); Philip G. Wilson et al., *Analysis of Minority-Status Supported Employees in Relation to Placement Approach and Selected Outcomes*, 29 MENTAL RETARDATION 329, 331 (1991) (finding that minority status-supported employees were younger, had higher skill scores, and earned more wages per month than did nonminority supported employees).

BEST COPY AVAILABLE

searchers must assess relative economic growth rates, as compared to growth rates in traditional employment, for example, attributable to self-employment for persons who are members of minority groups with and without disabilities.[158] A 1997 case study found important differences in the workplace accommodations provided for men versus women with disabilities. This in turn affected job advancement opportunities and subsequent income.[159] These barriers' effects on subsequent self-employment opportunity remains to be assessed. Future studies are likely to show that self-employment is a particularly effective strategy for women and minorities with disabilities who want to enter or re-enter the labor force.

As compared to individuals with disabilities generally, the present sample of EWD applicants is highly educated. About half of the applicants (49%) ended their education at the high school level. Another 41% had at least some college experience. Approximately 11% had less than a high school education. Figure 3 shows educational attainment levels of EWD participants at different stages of program involvement. As illustrated, 95% of those entrepreneurs whose cases were closed successfully had at least a high school diploma.

158. *See* Equal Opportunity for Individuals with Disabilities, 29 C.F.R. pt. 1630 (1991) (stating that the ADA is designed to enable all persons with disabilities to compete in the workplace based on performance standards and requirements identical to those that a covered entity expects of persons who do not have disabilities, subject to reasonable accommodation).

159. Jordan Jay Kaplan, Employer Compliance With the Reasonable Accommodation Provision of Title I of the Americans With Disabilities Act and Gender (1997) (unpublished manuscript, on file with authors).

As described earlier, educational attainment is a core predictor of labor force participation generally. National studies show that only 10.5% of individuals with disabilities attain a high school diploma.[160] Yet for the present sample of entrepreneurs with disabilities, a high school diploma seems to be a minimum requirement for success. Figure 3 shows that although individuals with less than twelve years of education comprised roughly 11% of the EWD applicant pool and 13% of those receiving EWD services, only 5% were successful by DVRS closure standards. In contrast, individuals with a high school diploma represent less than half of the EWD applicants, but more than half of the successful case closures. Further research needs to examine the relationship between educational attainment and success in self-employment activities for persons with disabilities.[161]

Disability Measures. EWD applicants evidence a range of disabilities. The categories of primary disability type are derived from Iowa's DVRS data base.[162] Because the term "disabled" includes such a wide range and severity of conditions, it is crucial that research measures of disability go beyond a unidimensional indicator.[163] For exploratory purposes here, we focus on two initial measures of disability that are important to an individual's decision to seek self-employment: (1) categorization of primary disability for receipt of state DVRS services, and (2) nature of disability in terms of its progressive or congenital status (e.g., onset and duration).[164]

Prior research examining measures of disability severity and employment outcomes suggests that disability type and severity are strong predictors of the probability of working.[165] This may be attributed to the difficulties that people with disabilities experience as a result of their health and transportation needs.[166] Schur's findings are in accord with the present trends, although she presented data for part-time employees, rather than for independent contractors.[167] Schur finds that, compared to other employees, part-time workers are more likely to report orthopedic, mental, emotional, and health conditions that limit their ability to work.

In Study II, almost half of the EWD applicants (47%) reported orthopedic impairments as their primary disability.[168] The most frequently reported orthopedic

---

160. *See supra* note 16 and accompanying text (discussing CPS findings).

161. Although the present findings reflect an older and more educated sample, these trends need to be compared to the state DVRS clientele generally and to other samples of entrepreneurs without disabilities in Iowa and elsewhere.

162. DIVISION OF VOCATIONAL REHABILITATION SERVICES (DVRS), INSTRUCTIONS FOR COMPLETION AND PROCESSING OF CLIENT SERVICE RECORDS CSR-300, C-10, 4 [hereinafter DVRS PUBLICATION, INSTRUCTIONS] (on file with the Iowa Law Review) (listing the categories used by the DVRS). *See infra* Appendix II (listing the categories coded by the DVRS and summarizing other categories). The impairments identified do not necessarily constitute disabilities for purposes of analysis under the ADA.

163. *See* Schwochau & Blanck, *supra* note 2, at 298-99 (discussing how varying definitions of disability impact the findings of employment studies of persons with disabilities).

164. In subsequent study we will use other measures of disability (e.g., severity and type) that help predict how those with disabilities move into and retain self-employment.

165. *See* Loprest et al., *supra* note 86, at S308-09 (1995) (finding that married women with severe disabilities had smaller reductions in their probabilities of working than men or single women with severe disabilities).

166. Schur, *supra* note 37, at tbl.4 (noting these and other related difficulties).

167. *Id.*

168. *See infra* Appendix I.

disabilities involved back impairments or injuries. These accounted for 21% of the applicants. Rehabilitation and medical professionals are keenly aware of the impact of back-related injuries on work place functioning: one out of every one hundred Americans is disabled by chronic back problems, and many more are considered partially disabled.[169] The economic cost of back injuries exceeded $20 billion in 1990 alone.[170]

Individuals with orthopedic impairments may pursue self-employment to find workplace accommodations that may not be available in larger employment settings or to find jobs that do not require lifting.[171] In addition to back impairments, orthopedic impairments in the present sample include quadriplegia, paraplegia, loss of a limb, cerebral palsy, congenital conditions, arthritis and rheumatism, polio, muscular dystrophy, Parkinson's disease, and spinal cord injuries.[172]

For individuals with orthopedic impairments, technology skills may be particularly important to obtain and maintain post-injury employment. Kruse and Krueger investigated the labor market effects of computer skills held by people with severe disabilities, specifically those with spinal cord injuries.[173] Their findings show that individuals with disabilities who are proficient in the use of computer technology are more likely than those without such skills to attain and retain competitive employment. Thus, they also are more likely to have higher earnings subsequent to their injuries. The importance of technological proficiency to successful entrepreneurs with disabilities is discussed in the final section of this Article. Researchers must assess the degree to which other aspects of disability, for example, age at onset, impact education and technological expertise that, in turn, influence decisions to pursue self-employment activity.

After orthopedic impairments, the next most frequently reported disabilities were mental and emotional conditions. Roughly one in five (19.8%) EWD applicants reported a mental or emotional condition as their primary disability. Mental and emotional disorders include, but are not limited to, neurotic and psychotic conditions, schizophrenia, and post-traumatic stress disorder.[174] The most frequently reported types are depression and depressive spectrum impairments (31%) and bipolar disorders (20%).

Additional study may confirm that, because of the episodic nature of mental health and emotional conditions, self-employment may be a desirable and effective employment option. One reason for this, as discussed in Study III interviews with entrepreneurs with depression, is the ability to regulate work hours and loads. Researchers need to examine the factors in the self-employed workplace that influence persons with mental disabilities to apply to the EWD program. This analysis

169. T.G. Mayer et al., *A Prospective Two-Year Study of Functional Restoration in Industrial Low Back Injury*, 258 JAMA 1763, 1764-65 (1987).

170. Bill Leonard, *Lower Back Pain Hits Employers in the Bottom Line*, 39 HR MAGAZINE ON HUM. RESOURCE MGMT. 53 (1994). This estimate does not include the indirect costs of hiring replacement workers, lost productivity, and legal costs. *Id.*

171. *Cf.* BLANCK, EMERGING WORKFORCE, *supra* note 23, at 32-33 (noting that the majority of ADA Title I claims involve back injuries and psychiatric disorders).

172. DVRS PUBLICATION, INSTRUCTIONS, *supra* note 162, at 4.

173. *See* Douglas Kruse et al., *Computer Use, Computer Training and Employment: Outcomes Among People with Spinal Cord Injuries*, 21 SPINE 891 (1996).

174. DVRS PUBLICATION, INSTRUCTIONS, *supra* note 162, at 7. Mental retardation accounts for roughly 2% of EWD applicants while alcohol dependence and abuse accounts for 3% of applicants.

may include factors such as job training, the availability of workplace accommodations, the availability of assistive and computer technology, and tax credits for small businesses to purchase such equipment.[175]

More than one in ten EWD applicants (11.7%) reported a neurological condition or a traumatic brain injury. Neurological impairments include multiple sclerosis,[176] learning disabilities like attention deficit disorder, narcolepsy, and cluster headaches. Individuals with these impairments readily progressed through the program and accounted for 15% of successful case closures.[177] Cardiac and circulatory disease and disorders accounted for roughly 3% of applicants, and sensory impairments (partial and total visual and hearing loss) accounted for approximately 2% of reported impairments.

In addition to actual impairments, the Iowa DVRS database codes the nature of disability either as a progressive disease process, a congenital impairment, or the result of an accident at the workplace or elsewhere.[178] More than half of EWD applicants (52%) reported progressive disease processes, such as multiple sclerosis and degenerative joint and disc diseases. Congenital conditions—such as blindness and hearing impairments at birth—accounted for 12%, and accidents comprised the remaining 32% of applicants.

Accidents at work accounted for 21% of the applicants' disabling conditions, while nonoccupational accidents accounted for 11%.[179] Especially for workers injured on the job, the costs and benefits of subsequent workplace accommodations under the ADA must be examined.[180] Little study has been conducted as to who bears the costs and receives the benefits associated with workplace accommodations in large organizations, and virtually no such research has been undertaken in the self-employment context. One study based on more than 1000 cases in the Canadian workforce examined the extent to which accommodation costs are shifted by employers to injured workers through wage adjustments upon the injured worker's return to work.[181] These researchers found that injured workers did not incur the cost of accommodations when they returned to their time-of-accident employer. Presumably, these workers were qualified to resume their essential, or comparable, job duties. In contrast, injured workers who returned to the workforce, but to a different employer—perhaps to self-employment—did pay for a portion of

---

175. *See* Iowa Assistive Device Tax Credit Act, H.F. 2560, 78th General Assembly, 2d Sess. (Iowa 2000) [hereinafter Iowa AD Tax Credit Act] (providing tax credit to small businesses for assistive devices and workplace modifications); *infra* notes 289-94 and accompanying text (discussing future study).

176. Aspects of this condition may be interpreted as an orthopedic impairment.

177. *See infra* Appendix I.

178. Thus, in Appendix I, each of the impairments listed are coded on these dimensions.

179. This finding is consistent with studies showing that self-employment is a prevalent option among people with work disabilities seeking to reenter the workforce. *See* KRAUS & STODDARD, CHARTBOOK, *supra* note 41, at 36 (finding self-employment rates to be 12% for people with work disabilities and 8% for workers without disabilities).

180. *See* Peter David Blanck & Glenn Pransky, *Workers with Disabilities*, *in* 14(3) STATE OF THE ART REVIEWS IN OCCUPATIONAL MEDICINE: SPECIAL POPULATIONS AND OCCUPATIONAL HEALTH 581-93 (Glenn Pransky & Howard Frumkin eds., 1999) [hereinafter Blanck & Pransky, *Workers with Disabilities*] (discussing relation of the ADA to workplace injury prevention programs).

181. *See* Morley Gunderson & Douglas Hyatt, *Do Injured Workers Pay for Reasonable Accommodation?*, 50 INDUS. & LAB. REL. REV. 92 (1996) (stating that although the ADA is not law in Canada, similar disability antidiscrimination laws are in place).

accommodations by accepting substantially lower wages.[182]

Additional study must examine the extent to which accommodations for workplace injury enable disabled workers to stay or return to work at their time-of-accident employer, move to a different employer, or pursue self-employment, either by choice or out of necessity. Ancillary study is needed to determine who bears the costs of accommodations, how these costs vary with job type, and how the costs vary with factors such as health insurance coverage rates. Some researchers suggest that ADA accommodations may increase, or at least help maintain, employment rates by enabling newly disabled workers to retain employment in larger firms. However, little is known about such trends in self-employment.[183] Other studies show that accommodations for workers' health conditions in larger firms extend those employees' work life an average of five years. Again, however, little is known about this relationship in the self-employment arena.[184]

Prior Employment and Economic Measures. The data in this study are arranged by the applicants' type and degree of integration in employment at the time of their application to DVRS. Consistent with our prior research on the labor force participation of disabled persons,[185] the data are organized into primary types of employment involvement, ranging from less to more integrated. These include: no employment, sheltered nonintegrated activity,[186] supported employment, for example, supported by a job coach,[187] and competitive permanent (or full-time self-employment). Figure 4 shows the employment status of EWD applicants.

---

182. *See* Pamela S. Karlan & George Rutherglen, *Disabilities, Discrimination, and Reasonable Accommodation*, 46 DUKE L.J. 1, 24 (1996) (suggesting, without the support of data, that persons with disabilities face higher costs of searching for a job than do persons without disabilities, and that if costs to employers of accommodation by job transfer are greater than costs to workers of a job search, then workers should bear that cost).

183. *See* Nancy R. Mudrick, *Employment Discrimination Laws for Disability: Utilization and Outcome*, 549 ANNALS OF AM. ACAD. POL. & SOC. SCI. 58, 68-70 (1997) (citing studies showing that the majority of persons injured in the workplace maintain their labor force attachment).

184. *See* Richard V. Burkhauser & Mary C. Daly, *Employment and Economic Well-Being Following the Onset of a Disability: The Role of Public Policy*, *in* DISABILITY, WORK AND CASH BENEFITS 59, 83 (Jerry L. Mashaw et al. eds., 1996) (noting that work life extension from accommodations was from 2.6 to 7.5 years, but the range was affected by the severity of condition and expected prognosis rates).

185. *See* BLANCK, EMERGING WORKFORCE, *supra* note 23, at 82-83 (explaining the data organization in our prior research).

186. *See* NAT'L COUNCIL ON DISABILITY, TOWARD INDEPENDENCE 75-76, B-81 (1986) (discussing sheltered employment as nonintegrated work setting).

187. *See id.* at 30.

Figure 4 illustrates that two-thirds (66%) of EWD applicants were unemployed at the time of their application. Less than one percent (0.6%) were employed in nonintegrated sheltered workshops. One in five applicants (21%) were engaged in competitive employment settings at the time of their application.[188] Approximately 9% of the applicants were self-employed and planning to expand or change their existing businesses. Although EWD programs may be viewed primarily as initiatives for unemployed persons, this last finding illustrates the EWD program's goal to expand and support existing small businesses for persons with disabilities.[189] Researchers need to study the trends toward self-employment after the passage of major laws such as the ADA, WIA, and The Ticket to Work and Work Incentives Improvement Act of 1999 (TWWIIA).[190] TWWIIA, in particular, is aimed at enabling people to return to work and reduce their dependency on cash benefits.[191]

More than one quarter (28%) of the EWD applicants reported income at the time of their application, with a median income of $149 per week.[192] These findings are comparable to Schur's national study showing the median weekly pay to be $148 for part-time workers with disabilities and $175 for similarly situated workers without disabilities.[193] In contrast, Schur found that weekly pay for independent contractors is dramatically higher, both for workers with and without disabilities ($326 and $462, respectively).[194]

Applicants working at the time of their EWD application reported a mean of twenty-eight hours worked per week, with a range from zero to seventy-five. Again, using Schur's study as comparison, she found part-time workers with disabilities worked a median of twenty hours per week, while part-time workers without disabilities worked twenty-one hours per week.[195] Weekly hours for independent contractors were considerably higher for both workers with and without disabilities (thirty-five and forty-two hours, respectively).[196]

Further study needs to determine the extent to which an individual's access to self-employment may be limited by preconceived or discriminatory attitudes, for

---

188. Future study will examine the reasons why individuals with disabilities leave traditional competitive employment activities for self-employment. Study III, *infra*, suggests that many workers with disabilities (or those who become disabled in workplace accidents) choose self-employment because their prior employers did not provide workplace accommodations. *See infra* notes 218-50 and accompanying text (providing findings from Study III interviews).

189. Interviews with Program Manager, *supra* note 36.

190. *See* Ticket to Work and Work Incentives Improvement Act of 1999, Pub. L. No. 106-170, § 2(b), 113 Stat. 1860, 1863 [hereinafter TWWIIA] (explaining the purposes of the Act). *See generally* JENSEN & SILVERSTEIN, POLICY BRIEF, *supra* note 143 (discussing the background and rationales of TWWIIA); Robert Silverstein, *Emerging Disability Policy Framework: A Guidepost for Analyzing Public Policy*, *infra* this issue.

191. TWWIIA may impact self-employment activities of persons with disabilities, for example by eliminating continuing disability reviews triggered solely by return to work activity. TWWIIA, *supra* note 190, § 111.

192. DVRS PUBLICATION, INSTRUCTIONS, *supra* note 162 (explaining that earnings are reported for the week prior to application for DVRS services and include wages, salaries, tips, commissions, and profits from self-employment). Weekly earnings range from $8 to $999. Weekly earnings are truncated to $999.

193. Schur, *supra* note 37, at tbl.5.

194. *Id.*

195. *Id.*

196. *Id.*

example, those of lenders or vendors, that disabled persons cannot work the hours required for self-employment activities. The present findings do not support the view that disabled persons generally cannot, or do not, work hours required in competitive employment settings. As illustrated in Study III, many disabled entrepreneurs find self-employment an attractive work option, given the flexibility of scheduling that is available.[197] Moreover, since the ADA's enactment—to the extent the law increases disabled workers' wages by eliminating discrimination in the labor market—disabled persons should have greater incentives to invest time in their human capital and in self-employment activities.[198]

Public and Private Assistance Measures. More than one third (40%) of EWD applicants reported financial assistance from family and friends as their primary means of support. This finding is consistent with prior study showing that almost half (47%) of the 10,000 members of the Disabled Business Person's Association reported family and friends as their primary means of start-up capital.[199] Moreover, the present finding is consistent with the demographic statistic that most successful EWD applicants are married. Although married persons represented 52% of the applicant pool, they represented 64% of successful case closures. Review of the impact of family supports (financial and otherwise) on successful self-employment outcomes is a topic worthy of future study.

Twenty-one percent of the applicants reported their primary source of support was SSDI. State workers' compensation payments provided primary income for 8%. Schur's sample shows significantly more disabled independent contractors receive SSDI or SSI disability income than nondisabled ones (9% versus 1%, respectively, and lower trends than the present study).[200]

Study II's findings regarding support payments are consistent, however, with those above showing that accidents at work account for 21% of disabling conditions of the EWD applicants. Eighteen percent of the applicants report other public assistance funds, including SSI and state supplements to SSI for blind and disabled persons, as their primary source of support.[201] Monthly public assistance amounts at the time of EWD application ranged from $0 (1 person) to $865 per month, with mean payments of $357 per month.[202]

---

197. *See* Walter Y. Oi, *Disability and a Workfare-Welfare Dilemma*, *in* DISABILITY AND WORK: INCENTIVES, RIGHTS, AND OPPORTUNITIES 31, 38 (Carolyn L. Weaver ed., 1991) (stating that "disability steals time" and describing connections between functional limitations and uses of time).

198. The incorporation into labor market analyses of those actively seeking work for pay in self-employment and other work activities would allow for assessment of whether the ADA has influenced the number of individuals choosing federal assistance over work. *See infra* notes 241-45 and accompanying text (discussing applicants' use of governmental assistance programs). One of the expected benefits of the ADA was a reduction in individuals' dependence on SSI or disability income. *See* Equal Opportunity for Individuals With Disabilities 29 C.F.R. pt. 1630 (1991) (estimating savings in support payments of $222 million).

199. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 25 (citing Urban Miyares, *The Enterprising Disabled: A Ten Year Perspective*, *in* THE ENTREPRENEUR WITH A DISABILITY: A REPORT ON THE 19TH MARY SWIZER MEMORIAL SEMINAR 66-69 (1996) (noting that only 7% of start-up capital comes from bank loans or investors)).

200. Schur, *supra* note 37, at tbl.5.

201. "Other" public support is undefined. *See* DVRS PUBLICATION, INSTRUCTIONS, *supra* note 162, at D-26.

202. In this sample, 100 EWD applicants reported income from public assistance programs. *See infra* Appendix I; DVRS PUBLICATION, INSTRUCTIONS, *supra* note 162, at D-26. Public assistance is

Finally, Appendix I shows that EWD applicants spent anywhere from less than one year to more than ten years in the state DVRS system. Eighteen percent of applicants spent less than one year.[203] It is likely that EWD applicants who spend less than one year in DVRS are participants who have been referred from EWD to qualify for services to assist their self-employment efforts.[204] Twenty-five percent of the applicants spent between one and two years in the system. Another 24% spent two to three years, and 14% spent three to four years in the system. Generally, the proportion of state DVRS program participants declines over time, with 1% spending more than nine years in DVRS before applying to the EWD program. By contrast, higher successful closure rates are evident for entrepreneurs who spent less than four years in the state DVRS.[205]

Proposed Self-Employment Activities. According to program staff, applicants typically apply to the EWD program with specific business ideas.[206] Figure 5 shows that more than half (54%) of EWD applicants proposed business ventures in the service sector. These applicants proved to be particularly successful in their business ventures, comprising almost two thirds (60%) of the cases successfully closed.[207]

---

defined as money payments made (a) directly to the client, (b) to the client's family unit because of the disability, or (c) to the client as part of a larger check to the family unit for a reason other than the client's disability/public assistance. We had access to applicants receiving SSDI and SSI who used SSA work incentive programs, such as Plans for Achieving Self-Sufficiency (PASS) plans. These findings show that: (1) 128 applicants were receiving SSDI benefits, (2) sixty-eight were receiving SSI benefits, (3) four of the SSI recipient applicants were using PASS plans that allow participants to set aside income and resources toward a work goal but do not count as income towards figuring SSI payments or towards resource limits for initial and continuing reviews, and (4) one applicant was using the Impairment Related Work Expenses (IRWE) work incentive, which is a deduction from gross earnings to establish countable earnings for "Substantial Gainful Activity" determination. *See* SOC. SEC. ADMIN., PUB. NO. 64-030, RED BOOK ON WORK INCENTIVES: A SUMMARY GUIDE TO SOCIAL SECURITY INCOME WORK INCENTIVES FOR PEOPLE WITH DISABILITIES 21-26 (1999) (stating that IRWE expenses are for items or services that allow the participant to work, related to the disabling condition, paid by the individual and not reimbursed, the expense is paid during a month when the participant is working). No applicants used 1619(A) or 1619(B) programs. *See id.* at 40-41 (noting that 1619(A) is "Special SSI Payments for People Who Work," and 1619(B) is "Continued Medicaid Eligibility" for people on SSI whose earnings are high for eligibility for SSI cash payments).

203. These time periods include time spent in the state DVRS system, tabulated by adding days spent in each status designation that DVRS uses, translating that number into years, and rounding down.

204. Interviews with Program Manager, *supra* note 36.

205. *See infra* Appendix I (illustrating these trends).

206. A listing of EWD applicant proposed business types is on file with the authors. The list includes business ideas in home health care services, clothing retail, automotive repair, computer training services, graphic design services, day care services, restaurant ownership, custom sewing services, vending machine sales, sign making, lawn care, hair styling, auto detailing, laser and ink cartridge restoration, goat farming, rabbit farming, and bait and tackle retail.

207. *See infra* Appendix I (illustrating trends).

This finding is substantially higher than Schur's national trends. Schur found that roughly 8% of independent contractors with disabilities and 9% without disabilities worked in the service sector.[208] Another third of EWD applicants (32%) proposed ventures in the retail sector.[209] Schur found that about 19% of her sample were engaged in sales or retail activity, compared to 18% for people without disabilities.[210] Fewer EWD applicants proposed ventures in manufacturing (6%), agriculture (3%), construction (3%), and wholesale (2%) activities.[211]

Researchers should examine the economic and social incentives and disincentives—as well as the influence of individual experience with business planning and marketing—that affect the types of business EWD applicants pursue and their success rate. This analysis may be conducted in different geographic markets, during different economic cycles, and of persons with differing disabilities. Arnold and her colleagues conducted such an analysis of the employment categories of VR self-employment case closures.[212] They found a broad range of over 100 businesses, including service, retail, entertainment, and health care ventures.

Characteristics of Closed Case Files. Appendix I presents demographic information for EWD participants whose case files closed successfully. This information is set forth in the second to last column from the right. In the initial years of the EWD program, entrepreneurs whose cases were closed tended to be married white males with at least a high school education. The majority of these individuals tended to have orthopedic, mental, or neurological conditions, and their impairments were progressive. Almost two thirds (60%) of entrepreneurs whose cases were closed started businesses in the service industry, while one quarter (24%) ventured into the retail industry.

Approximately two thirds (64%) of EWD participants whose cases were closed successfully were unemployed prior to beginning the program. One third (33%) were either competitively employed or self-employed prior to beginning the program. When their files were closed, these entrepreneurs generally were working more hours and receiving less public assistance than before the start-up phase of their businesses.[213]

EWD participants whose cases successfully closed also showed substantial increases in their weekly earned incomes. Information is available on weekly income at the time of EWD application and at case closure for thirteen participants.

---

208. Schur, *supra* note 37, at tbl.5 (stating that the difference between proportion for disabled and nondisabled is not significant). This difference also may be due to the fact that many applicants choosing ventures in the service sector ultimately may not be successful in that area.

209. Although retail ventures comprised 32% of the proposed ventures, they represented 24% of the cases closed successfully. *See infra* Appendix I (illustrating trends). Further study is warranted into the relation among business labor and market sector and successful outcome for entrepreneurs with disabilities.

210. Schur, *supra* note 37, at tbl.5 (stating that the difference between proportion for disabled and nondisabled is not significant).

211. One person proposed a nonprofit business; nonprofit businesses are not authorized to receive program support.

212. *See* Nancy Arnold et al., *Self-Employment as a Vocational Rehabilitation Employment Outcome in Rural and Urban Areas*, at http://ruralinstitute.umt.edu/rtcrural/SelfEm/Monograph/ SelfEmMono.htm.

213. Results at closure were compared to information from time of application to DVRS. Moreover, the positive findings are true for individuals who had been served in the state DVRS system for two to four years. *See infra* Appendix I (describing trends for length of time in DVRS system).

For them, an average increase in income of $230 per week was reported, with a median increase of $150 and a wide range from $124 to $868.

The characteristics of the cases closed warrant further analysis, as does their potential to serve as best practice models for others entering the program.[214] Arnold and her colleagues are examining VR employment outcomes as measured by the proportion of case closures to self-employment.[215] These researchers are examining VR self-employment case closure rates in rural and urban states and as predicted by VR counselor attitudes. To address these questions Arnold uses a "ruralness index" as a predictor of self-employment case closures.[216]

Using 1988 VR national employment outcome statistics, Arnold's analysis ranks Iowa twenty-first in ruralness, with successful case closures for self-employment at 6.41, the third highest case closure rate. Vermont and New Mexico are the two states with higher closure rates. The state with the highest ruralness rating is Alaska, with a 3.92 closure rate. Rhode Island has among the lowest ruralness ratings and a 1.76 closure rate. The findings support Arnold's hypothesis that self-employment case closures are more likely in rural than urban states. Nevertheless, overall closure rates are relatively low—ranging from 0.53% to 7.34% across all states—as compared to statistics showing the substantially higher proportion of entrepreneurs with disabilities nationwide.[217] As mentioned previously, research suggests that VR self-employment case closures often are a function of counselor attitudes about, and experience with, self-employment activities.

Summary. Study II examined data from Iowa DVRS records on the characteristics of applicants to the EWD program and those entrepreneurs in various stages of the program. Further study will need to contrast the demographic characteristics of EWD applicants with people receiving other state DVRS services, and with other entrepreneurs, both with and without disabilities, who do not participate in public programs. Outcomes measures such as economic self-sufficiency and quality of life need to be assessed for persons with and without disabilities at different points in the employment continuum and sectors of the labor market.

D. Study III: Interviews with EWD Participants

Overview of Approach. In Study III, a stratified sub-sample of EWD participants were interviewed in structured telephone sessions.[218] Two teams of trained graduate students interviewed program participants. EWD personnel and researchers exchanged telephone and e-mail messages in an effort to clarify information developed from the interviews.[219] Additional program and research documents, for

---

214. *See* Inst. on Rehabilitation Issues Prime Study Group, People with Disabilities Developing Self-Employment & Small Business Opportunities (1998) [hereinafter IRI] (examining self-employment with guidance for DVRS counselors).

215. *See* Arnold, *supra* note 212.

216. *See id.* (computing the index for each state from measures of population density and percentage of population living in urban areas).

217. *See supra* notes 37-41 and accompanying text.

218. Researchers reinterviewed Program Staff and the Program Manager on aspects of program operation.

219. The researchers consulted with the EWD Program Manager in developing the interview format. Once the topic areas were identified and interview questions developed, the researchers tested the interview script with EWD participants and others with disabilities. Interview questions were revised and expanded. The EWD participants who had been interviewed were reinterviewed using the revised

example, database information regarding state DVRS participants, were collected and reviewed as a result of information derived from the interviews.

In the interview sessions, the researchers explained the purpose of the study and noted that all information would remain confidential unless the entrepreneur opted to be profiled in future studies. The researcher explained that he or she was interested in the participants' views and self-reported opinions, and that often there would be no correct answer. The researchers faced the challenge of standardizing the question format while allowing the participants flexibility to convey information that could be coded reliably. Given the interests of the participants and their varied experiences, interview length and scope varied considerably, from twenty minutes to two hours.

Appendix II summarizes the interview format. Although the interviews proceeded in the structured format, participants were able to expand their answers or ask for clarification. Interviewers were required to engage in active listening, often to expansive answers. Follow-up questions were necessary and inserted between longer responsive narratives. Interruptions by the interviewers were limited to clarify answers. Interviewees often veered in unexpected but important directions, providing a more expansive answer to the original question.[220]

Like the prior study, Study III examined existing demographic and program data, as well as information derived from the interview process. EWD participants who received program services and started or expanded businesses were identified to be interviewed.[221] The right column of Appendix I reports the demographic characteristics of the sub-sample of thirty interviewees.

The EWD database and many program files did not contain information about the participant's disability. In many interviews, participants chose not to reveal information about their disability. In addition, some participants expressed concern about revealing aspects of their businesses because of previously experienced employment discrimination. They were hesitant to expose their businesses to such attitudinal barriers when their disability was invisible and unknown to their customers, and they often wished to safeguard business information that may assist competitors. For these reasons, the names of participants and businesses are changed, and where possible, aggregate trends are described in the reporting of Study III findings.[222]

After identifying areas of study and the EWD participants to be interviewed,[223] the interview process proceeded. Early in the interview process, and to validate the areas to be reviewed (e.g., nature of business and sources of income), researchers conducted field visits to the EWD program offices to review

---

and expanded questions.

220. As the interviews progressed, some participants did not, or were not able to, provide complete information for each interview session. To attempt to triangulate the information, subsequent interviews were conducted with the EWD Program Manager. These interviews revealed that much of the missing information for each participant (e.g., consultant costs) was contained in the EWD program files.

221. The thirty interviewees who agreed to participate represented approximately one quarter of the 112 program participants who had started or expanded businesses through the EWD program.

222. For illustrations of case studies, compare P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 11-15 (describing the experiences of entrepreneurs with disabilities).

223. All interviewees were mailed a written consent form, per human subjects research requirements.

program data and collect missing data that interview participants may not have been able to report. These follow-up discussions were useful to clarify the role of program consultants and review EWD staff and participant interactions.[224]

Finally, the question of the findings' generalizability to other EWD participants or to similar programs in other states is an important topic. It was raised by the EWD program staff and participants themselves. Refinement and replication of the findings will need to be accomplished across many studies. However, the present study was conducted in ways that were designed to improve the generalizability of findings by using stratified sampling techniques,[225] data source triangulation, and multiple methods and measures to collect information.[226]

Interview Themes and Initial Findings. The road to self-employment, as described by many of the interviewees, is riddled with obstacles and setbacks, many of which are unforeseen by the entrepreneur before making the decision to start a business. Participants reported that they often encountered these obstacles, regardless of their disability. Our review of interview information revealed common experiences and provided insight into the process of becoming self-employed. The recurring themes relate to (1) the decision to pursue self-employment, (2) economic implications of self-employment, (3) independence and commitment to self-employment, (4) health care and insurance needs associated with self-employment, (5) encountering employment discrimination before and after self-employment, and (6) the challenges of staying self-employed.

The Decision to Pursue Self-Employment. In many cases, entrepreneurs with disabilities were employed in other fields before the onset of their disabilities. Twenty-five of the Study III interviewees (83%) reported that they had an income before the onset of their disability. Their prior work incomes ranged from $0 to $150,000, with a median of $25,000 and a mean of $34,583.[227]

One participant had earned between $75,000 and $125,000 annually as a sales manager. In this case, the interviewee reported that his disability "forced him" to seek self-employment.[228] Of those twenty-five consumers who reported pre-

---

224. The collaborative process enabled researchers to clarify the interview questions that were to be asked by the second independent interviewer so that the second interviewer could check for errors of self-reporting, develop additional information, and verify reported facts. Discussions among the researchers and EWD staff assisted in the verification of the information collected and the development of methods. This interaction helps to gain the permission and trust of the participants to conduct subsequent phases of the investigation.

225. A first round of nineteen participants at different stages in the EWD program were selected randomly. A second round of twenty-one participants then were selected to enhance the sample heterogeneity on the basis of business type and disability type and severity. In total, thirty participants agreed to be interviewed.

226. After testing the interview format and reviewing the program data, the researchers observed EWD staff engaging with participants to check the accuracy and information provided by the program.

227. In Study III, twenty-seven people were employed before onset, three were not. For income levels of persons with disabilities, see Douglas Kruse, *Persons with Disabilities: Demographic, Income, and Health Care Characteristics*, 121 MONTHLY LAB. REV. 8-15 (1998) (finding that people with disabilities are twice as likely to live in poverty than people without disabilities).

228. The findings from Study III illustrate that there are aspects of successful entry to self-employment for people with disabilities that are more difficult than entry into traditional large corporate work settings (e.g., the provision of one's own workplace accommodations or the need to attain sufficient investment capital). The preliminary findings also illustrate, however, that there are aspects of self-employment that are particularly attractive to people with disabilities, such as the ability to maintain flexible work hours and limit transportation to work barriers.

disability income, twenty-two (88%) reported post-disability income. For those reporting post-disability income, the average loss of income after they became disabled was $11,649, with a median loss of $10,130.[229] This finding is consistent with studies showing the negative effects of disability on employment and income immediately after onset.[230]

For many interviewees, becoming self-employed involved the risk of personal investment to begin the new business. EWD interviewees invested between $6000 and $500,000 in start-up costs. They raised money from a variety of sources including personal funds, family loans, bank loans, and grants from EWD. Two entrepreneurs, Nicole and Derek, refinanced their homes to raise part of the capital required to start their businesses. Matthew used money from an inheritance to start his business. Albert used $100,000 from a settlement that resulted from the injury causing his disability.

Once the initial investment was made, interviewees reported the need to make the business operational as soon as possible to recover their initial costs. In many cases, however, and due to a variety of reasons, the process by which their businesses became operational took longer than anticipated. For the twenty-eight participants who experienced a waiting period to open their businesses after their first contact with EWD, the median length of time was six to seven months, with a range of zero to thirty-six months. This range is attributable to a number of factors, including varying amounts of technical assistance and required financing.

Thus, Daniel opened his restaurant eight months after his initial contact with EWD. Jason received the first order for his product eleven months after he applied for financial and technical assistance to begin his company. Some people, like Ray, were able to use the assistance they received from EWD immediately because they already were in business and required additional support or assistance to expand or restructure their operations. Some participants like Don took three years to secure the financing and develop a feasible business model.

Economic Implications of Self-Employment (Income, Revenues, and Interviewees as Employers). EWD participants are likely to draw little or no business income during the first few months or years of self-employment. For some, this means an initial substantial decrease in income. For most EWD participants interviewed, however, income levels were reported to increase after several years. Subsequent study of EWD business outcomes must take into account time factors related to start-up costs, both direct (e.g., earned income levels) and indirect (e.g., potential decrease in the ability to afford adequate health care insurance).

Eleven interviewees (37%) reported that they had income at the time of their application to DVRS. This small sub-group demonstrated an increase in their incomes from the time of application to the time of self-employment at an average of $13,528 per year.[231] Twenty-five interviewees (83%) reported a gross annual in-

229. The greatest loss was $100,000 per year, and the greatest gain was $72,000 per year.

230. *See generally* ALAN KRUEGER & DOUGLAS KRUSE, LABOR MARKET EFFECTS OF SPINAL CORD INJURIES IN THE DAWN OF THE COMPUTER AGE (Nat'l Bureau of Econ. Research, Working Paper No. 5302, 1995) (discussing employment and income trends); Richard V. Burkhauser & Mary C. Daly, *Employment and Economic Well-Being Following the Onset of a Disability*, *in* DISABILITY WORK AND CASH BENEFITS 59-101 (Jerry L. Mashaw et al. eds., 1996) (discussing employment and income trends); Schur, *supra* note 37, at 12-13, 24 (noting trends in contingent workforce).

231. The greatest realized loss was $27,560, and the greatest increase was $75,024.

come from their businesses in 1998. These ranged from $0 to $90,000 per year, with a median of $12,000 per year, and a mean of $20,723.

In one case, the entrepreneur earned $45,000 to $50,000, which was similar to the salary he earned before beginning his own business. Other participants reported an increase from prior salary, in addition to the benefits associated with being self-employed, such as increased flexibility in scheduling work. Allen reported a self-employed income of $25,000 in 1998, which was an increase of $5000 from his previous salary.

Some EWD participants, such as Robert, indicated that initially they earned a low income, which increased once the business expanded and took hold. In Robert's case, his income climbed from $400 in his first year of operating a vending machine business, to $8000 in 1999. Though still preliminary, several of the cases studied here comport with Kruse and Hyland's findings that, over time, disabled persons who are self-employed and do home-based work should have higher income levels on average than their on-site counterparts.[232]

In some cases, entrepreneurs reinvested all revenues into maintaining the business. In other cases, interviewees reported that they wanted to limit their earned income to continue to draw public benefits, the distribution of which is contingent on falling below a certain income level (the so-called "income cliff").[233] Jason earned $50,000 a year (approximately $4165 per month) in the construction business before he became disabled; he reported that now he can earn no more than $480 per month to maintain the Medicaid coverage on which he depends for the substantial health care costs associated with his quadriplegia.[234]

Perhaps for related reasons, the range in gross annual business revenues was larger than the reported prior salaries. Twenty-eight interviewees (93%) reported their business revenues, which ranged from $9000 to $900,000 in 1999, with a median of $44,000.[235] These numbers represent a significant range of economic activity, including paying taxes, buying supplies, leasing space, and paying employee salaries. In many cases, most revenues generated are needed to maintain the operation and pay off the loans required to begin the business.

For instance, Norman operates a business with a gross annual revenue of $900,000 per year. He draws $12,000 in income, investing revenues to maintain and upgrade existing equipment and to purchase new equipment. Norman earned $75,000 to $125,000 as a sales manager before being self-employed. In comparison, Wendy posted gross annual revenues of $25,000 after three years in an animal show registry business, from which she draws approximately $12,000 in salary. Like Norman, Wendy is working to increase revenues to provide herself with a salary equal to the $42,000 she was earning as an insurance agent before she became self-employed.

After one year in business, Jennifer posted revenues of $18,000, most of

---

232. *See* Kruse & Hyland, *supra* note 64, at 27 (finding this effect for employees without disabilities).

233. The deferral of income is a common strategy used by entrepreneurs for reasons related to the planned growth of the enterprise.

234. Tracking income and other eligibility guidelines for public and private benefits programs is a necessary but daunting task for persons with disabilities. *See infra* notes 240-45.

235. The mean gross annual income was $124,318.

which she reinvested in her daycare business. Derek's waterproofing business grossed $40,000 after its first year, with most revenues generated in the final quarter of the year because of seasonal effects. Stephen realized a loss of $4900 because of a downturn in the farming economy, on which his pastureland clearing and hauling business depends.

As would be expected, a significant business expense for some participants is employee salaries. Almost half (40%) of the EWD participants interviewed had employees, ranging from one to six employees per business. The businesses sampled employed a total of twenty-nine people in addition to the owners. Including the owners, these EWD businesses created fifty-nine jobs in the 1999 Iowa workforce. Although employee salary information was not collected in the present study, employees are paid competitive wages.

Independence and Commitment to Self-Employment (Hours Worked). Most entrepreneurs experienced an increase in the number of hours they worked soon after start-up. New entrepreneurs reported that it was difficult to afford to hire employees during their first few years in business. As a result, these entrepreneurs, like most, perform much of the work associated with start-up.

Of those interviewed, 87% reported the number of hours spent at work per week. Responses ranged from twenty to eighty-five, with a median of fifty-five and a mean of fifty-four work hours per week. By way of comparison, Schur's findings show that independent contractors with disabilities work an average of thirty-six hours per week, as compared to forty-two hours per week for those without disabilities.[236] Permanent full-time employees with disabilities worked an average of forty-three hours per week, and permanent workers without disabilities worked an average of forty-four hours per week.[237] Thus, the present sample of EWD participants reported working, on average, longer weekly hours than a comparison group of independent contractors and permanent workers with and without disabilities.[238]

As would be the case with any start-up business, EWD participants reported that the number of hours worked during an average week varied depending on the stage of business development and operations. Larry responded that he typically works in the computer business sixty hours per week. Similarly, Shane typically spends seventy-five hours per week at work while he develops a consumer base for his retail business.

Perhaps not surprisingly, this group of highly motivated entrepreneurs (twenty-five of those interviewed) reported that they spent up to ninety hours working per week before becoming disabled, with a median of forty hours per week. For example, Allen, who previously worked for a large electronics company, spent approximately forty hours per week at that job. After the onset of his disability, Allen began his own electronic repair business and was required to work sixty hours per week to maintain it. Allen said, as did many EWD participants, that although he works longer hours, he enjoys the flexibility of being self-employed and able to design his work and home life schedules.

---

236. Schur, *supra* note 37, at tbl.5 (noting that the difference between disabled and nondisabled workers is significant).

237. *Id.*

238. Study is required to assess whether the self-reported data comport with actual observed work hours and the degree to which the present self-selecting sample is representative of other like samples.

Don reported a similar experience. Before the onset of his disability, Don worked twenty-five hours per week as a corporate fitness trainer. Once Don's disability precluded him from continuing, he decided to open his own restaurant. Don works sixty to eighty hours per week at his restaurant. Like Allen, Don enjoys the flexibility in his schedule, despite the fact that the schedule is demanding in terms of the time commitment.

Michael experienced an increase in the number of hours he worked per week when he became self-employed, although he has had his disability since the age of three. While Michael previously worked forty hours per week, being self-employed requires him to work fifty to seventy hours per week. Michael, like many of the EWD participants, illustrates that assumptions about disabled persons' abilities to work long hours should be reexamined in the self-employment context.[239]

Health Care, Insurance Needs, and Self-Employment. The ability to obtain and afford health care and insurance is a major concern for entrepreneurs with disabilities. Less than one quarter (23%) of EWD participants interviewed had health insurance with their existing businesses. Most of the participants (72%) had private health insurance before becoming self-employed. Yet more than half (56%) responded that they lost private health insurance coverage when they began their own businesses.

In many cases, EWD participants receive private health insurance coverage under a spouse's policy. Ray and Daniel reported that they maintained coverage under their spouses' health insurance plan because they were unable to find affordable health insurance as small business owners. Ray, who is a transplant recipient, says he is not able to find affordable health coverage through his small business for two reasons: he is an entrepreneur and has a disability that entails high medical costs.

The challenge of finding adequate and affordable health insurance coverage was reported by many interviewees. Jennifer purchased private health insurance coverage through her business. She believes that the cost is high ($500 a month with a $2500 deductible) because of the nature of her disability. Other entrepreneurs rely on Medicare, SSDI benefits, Veterans' benefits, or Medicaid to cover the costs of their health care needs.[240] John, who is a quadriplegic, uses Medicare but purchases health insurance through his small business for his family. John excludes himself from the policy in favor of public programs because coverage for himself would increase dramatically the $450 per month cost.

Study is warranted on the extent to which obtaining adequate and affordable health insurance coverage is a factor in the self-employment of entrepreneurs with disabilities. Policymakers anticipate that TWWIIA will positively enhance health insurance options for workers with disabilities. Thus, while the Balanced Budget Act of 1997 allowed states to offer Medicaid "Buy-In" insurance for disabled people with earnings over the SSI threshold amount (up to 250% of federal poverty guidelines), TWWIIA changes this by adding two new options.

First, states now may allow people with income over 250% of the federal

239. For a related critique, see Schwochau & Blanck, *supra* note 2, at 284-85, 305.

240. *See infra* notes 241-45 (discussing governmental benefits program).

poverty level to buy into Medicaid if they are otherwise eligible for SSI.[241] Second, individuals whose medical condition has improved, making them ineligible for SSI or SSDI, may buy into Medicaid if they continue to have a severe, determinable impairment.[242] Premiums and other cost shares are on a sliding scale. For those with incomes between 250% and 450% of the poverty level, premiums may not exceed 7.5% of their income.[243] Careful analysis is warranted to determine the degree to which this policy change helps self-employed persons with disabilities afford health insurance, particularly during the early and difficult years of business start-up.

In addition, TWWIIA extends Medicare coverage for people returning to work from SSDI to 8.5 years without payment of a Medicare Part A premium.[244] After 8.5 years, the individual may continue to receive Medicare by paying the premiums for both Part A and Part B. As the present findings illustrate, this policy may stimulate a high proportion of SSDI beneficiaries to return to work, maintain Medicare coverage, and attempt self-employment without risk of loss of insurance coverage.[245] The availability of Medicaid insurance, coupled with costs tied to income, also may make self-employment an attractive alternative for persons with severe disabilities.

Encountering Discrimination Before and After Self-Employment. The majority of participants interviewed indicated that they encountered employment discrimination after they became disabled. Of the twenty-eight entrepreneurs who answered questions related to discrimination, sixteen (57%) indicated that they experienced employment discrimination attributed to their disability. For many participants, more than three-quarters (77%) of those interviewed, this discrimination (actual or perceived) motivated them to start their own businesses.[246]

In other cases, entrepreneurs pursued self-employment to "self-accommodate" their workplace needs, which often were not accommodated in prior competitive employment.[247] A line of research worthy of future study will be to examine the provision, and costs and benefits, of workplace accommodations in self-

241. TWWIIA, *supra* note 190, § 201(a)(1); JENSEN & SILVERSTEIN, POLICY BRIEF, *supra* note 143, at 5 (discussing the addition of section 1902(a)(10)(A)(ii)(XV) to the Social Security Act).

242. *See* TWWIIA, *supra* note 190, § 201(a)(2); JENSEN & SILVERSTEIN, POLICY BRIEF, *supra* note 143, at 5 (discussing the addition of Section 1902(a)(10)(A)(ii)(XVI) to the Social Security Act).

243. *See* TWWIIA, *supra* note 190, § 201(a)(3); JENSEN & SILVERSTEIN, POLICY BRIEF, *supra* note 143, at 5 (discussing the addition of section 1916(g) to the Social Security Act). Individuals with incomes over $75,000 must pay all premium costs, or the state can subsidize the cost, but not with federal match dollars. *See* TWWIIA, *supra* note 190, § 201(a)(3)(2).

244. *See* TWWIIA, *supra* note 190, § 202(a); JENSEN & SILVERSTEIN, POLICY BRIEF, *supra* note 143, at 5 (discussing the amendment of section 226(b) to the Social Security Act).

245. TWWIIA requires the establishment of community-based work incentives planning, assistance programs, and SSA work incentives specialists, which may assist in the self-employment process. *See* TWWIIA, *supra* note 190, § 121.

246. In essence, many of these entrepreneurs were internalizing the costs of "discrimination" by starting their own ventures. *See* Peter David Blanck & Mollie Weighner Marti, *Attitudes, Behavior, and the Employment Provisions of the Americans with Disabilities Act*, 42 VILL. L. REV. 345-408 (1997) (discussing bases for attitudinal disability discrimination); Mollie Weighner Marti & Peter David Blanck, *Attitudes, Behavior, and the ADA*, *in* EMPLOYMENT, DISABILITY, AND THE AMERICANS WITH DISABILITIES ACT: ISSUES IN LAW, PUBLIC POLICY, AND RESEARCH (P.D. Blanck ed., 2000) [hereinafter Marti & Blanck, *Attitudes, Behavior, and the ADA*].

247. *See supra* notes 38-44 and accompanying text (discussing studies of workplace accommodations).

employment settings—where entrepreneurs often choose to internalize the costs of workplace accommodations—as compared to the provision of accommodations by large corporate employers.[248]

Reported employment discrimination affected the entrepreneurs in two primary areas: "becoming unemployed" and "attempting to be hired." First, as mentioned, many participants experienced discrimination by a prior employer and believed that they were compelled to leave that employment. The experience of becoming unemployed was reported to be a strong motivating factor toward self-employment. Richard sustained a serious back injury that caused a permanent disability. The disability imposed physical limitations that prevented Richard from regaining his full ability to work. Richard underwent several operations in an attempt to restore his physical capacity. During the period of recuperation, Richard believed that he experienced discrimination from his employer because of his absences. This "taste" of discrimination was a primary factor in Richard's decision to start his own business.

Daniel reported experiencing employment discrimination after the onset of his disability. When his employer discovered his disability, Daniel reported that he experienced overt discrimination. Daniel did not initiate an ADA claim, although he had some knowledge of the law. Instead, he left the employment voluntarily and began his own business almost immediately. Daniel's limited knowledge of the ADA is characteristic of the entrepreneurs interviewed. Most entrepreneurs (73%) reported knowledge of the ADA after the onset of their disability. The factors affecting awareness and use of the ADA over time are a fruitful area for study in self-employment and other contexts.

The second area in which entrepreneurs experienced discrimination was in the search for employment after the onset of their disabilities. This perceived hiring discrimination also served as a strong impetus for entrepreneurs to pursue self-employment as an alternative to traditional avenues in the job market. Kathy applied for dozens of positions and was rejected repeatedly. She believes that the main reason she was denied employment was because of her visible physical disability.[249]

Similarly, Emily started her own business after several unsuccessful attempts to gain employment in the competitive workforce. Stephen likewise believes he faced discrimination in his search for employment. Employers rejected Stephen on numerous occasions, he reports, only after they discovered that he had a nonvisible disability for which he had received workers' compensation payments. Stephen started a retail enterprise after being discouraged by the treatment he received in the hiring process.

Challenges: Present and Future. Like all entrepreneurs, people with disabilities who start their own businesses experience a wide range of economic, practical,

---

248. It may be the case that standard economic theory assumptions about the provision of workplace accommodations in large corporate settings are not applicable to self-employment and micro-enterprise ventures. For a related review, see Schwochau & Blanck, *supra* note 2, at 283-93 (noting that the ADA only applies to employers with fifteen or more employees).

249. One of the most difficult areas in which to prove employment discrimination is the interviewing and hiring process because underlying attitudinal biases can be subtle or even unconscious. *See* Blanck & Marti, *supra* note 246, at 349-51.

and attitudinal challenges.[250] More than half (52%) of the entrepreneurs with disabilities interviewed reported that their major challenges were business-related. Slightly less than half of those interviewed (48%) reported disability-related changes.

Jennifer reported that her major challenges related to her business operations (operating a daycare service). Her challenges included the unpredictable needs of her customers, turnover rates in enrollment, and demanding work hours. Jennifer believes that her future challenges involve business expansion. She is planning to enter a partnership and apply for a new license that will allow her to serve more children.

Jason reported several challenges, most of which were unrelated to his disability. His most significant challenge was obtaining state approval for the sale and use of his patented assistive technology device. Jason now faces the challenge of expanding the scope of his approval so that his product is available to a larger group of customers.

Allen's greatest challenge was obtaining and maintaining affordable health care. Like many interviewed, without the health insurance coverage offered to his family by his spouse's employer, he would have been unable to pursue self-employment. Other participants reported that they pursued self-employment to improve their health by eliminating disability-aggravating circumstances of competitive employment settings, such as inflexible work hours and lack of workplace accommodations. Still other entrepreneurs, like Nicole, reported the daily challenges that are related directly to their disabilities. Nicole is concerned that the physical challenges of fibromylangia and arthritis increasingly will make it difficult for her to work at desktop publishing for the long periods necessary to meet her business demands.

IV. IMPLICATIONS

This Article began by raising questions about the composition, quality, and competitiveness of the American workforce of the twenty-first century. To help to address these questions, the present investigation explored one type of employment opportunity for disabled persons—self-employment and entrepreneurial activities.

Researchers need to conduct additional systematic studies to assess the impact of self-employment on the lives of disabled individuals and local and national economies and policies. Multiple qualitative and quantitative methods, involving observation, interview, economic, and archival analysis, for example, need to be developed and refined. Reliable and valid indicators of program and participant "success" are needed, both to complement those used by DVRS (e.g., case closure standards) and by Iowa EWD program managers. As Frederick Collignon has suggested, such indicators must reflect the severity of the participants' disabilities, be rigorously measured, using multiple sources of information collected independently over time, and be relevant to disabled persons, policymakers, and others.[251]

---

250. For case studies of entrepreneurs with disabilities, see *Bridges to Employment: Entrepreneurship*, *at* http://www.worksupport.com/topics/entrep2.asp (linking to a project sponsored by Virginia Commonwealth University, describing entrepreneurs' success stories); IRI, *supra* note 214, at 14-15 (discussing challenges and barriers to self-employment).

251. *See* Collignon, *supra* note 83, at 132-36. Future study of Iowa's EWD program may use indi-

This final section reviews our broader program of study examining competitive labor force strategies and employment opportunities for disabled persons and their relevance to self-employment. It identifies research questions left unresolved by Studies I, II, and III. As is the case with exploratory research, the patterns in the studies raise myriad questions.

A. Researching the Continuum of Employment and Disability

In the past twenty-five years, disability laws and policies have undergone a dramatic shift from a model of charity and compensation, to medical oversight, and then to civil rights.[252] Existing and proposed employment policies and laws focus on increasing disabled persons' labor force participation and reducing their dependence on governmental entitlement programs. Federal laws such as the WIA, TWWIIA, and ADA, and state initiatives such as Medicaid Buy-In programs, illustrate support for enhancing a range of employment opportunities for working-age adults with disabilities and preventing discrimination in the workplace.[253] Private initiatives by lenders, banks, and insurance companies reflect acknowledgment of the potential market for self-employment and entrepreneurial activities by disabled persons.

Despite these varied activities, there is remarkably little research regarding disabled persons' participation in the continuum of workforce activities, from self-employment, to contingent employment, to full-time competitive employment.[254] The primary way to assess whether public and private employment initiatives are successful is by assessing information regarding their influences.[255] To be relevant to policymakers, researchers, employers, and persons with disabilities, information must be derived from study of the actors affected by the legislation, law, or program—in the present program of research, the self-employment of disabled entrepreneurs and their firms.

Undoubtedly, researchers in different fields of study will approach questions from distinct perspectives. Policymakers, persons with disabilities, and entrepreneurs, however, will gain a more complete picture of the influences of public-

---

cators mentioned in this Article and others, such as participants' earned and gross income levels, availability and affordability of health insurance, reductions in welfare dependency, capital investments in the business, receipt of capital from lenders, levels of computer and Internet usage, costs and benefits of workplace accommodations, and economic sustainability and growth of the business venture. In addition, other measures may include the following: independent evaluations of participants' impairment type and severity, scales of individual functioning, perceptions of discrimination and ADA civil rights, the degree of independent living, and self-determination and quality of life (e.g., prior to and after beginning the EWD program). Outcomes on these measures also may be compared to those of other groups not participating in EWD-type programs (e.g., control groups) in Iowa and elsewhere. Finally, to rigorously collect and analyze such information, additional attention must be devoted to standardized and centralized data and filing systems so that researchers may conduct cross-sectional and longitudinal studies of EWD participants and program impact.

252. *See generally* Marti & Blanck, *Attitudes, Behavior, and the ADA*, *supra* note 246.

253. *See* Peter David Blanck & Helen A. Schartz, *Towards Researching a National Employment Policy for Persons with Disabilities*, *in* EMERGING WORKFORCE ISSUES: W.I.A., TICKET TO WORK, AND TRANSITION (R. McConnell ed., forthcoming 2000) (manuscript on file with authors) (discussing research of new welfare reform laws); Peter David Blanck, *Researching the Work Environment: Disability, Employment Policy, and the ADA*, *in* THE NEW PARADIGM ON DISABILITY: RESEARCH ISSUES AND APPROACHES (K. Seelman ed., forthcoming 2000) (same).

254. BLANCK, EMERGING WORKFORCE, *supra* note 23, at 69.

255. Collignon, *supra* note 83, at 130; Schwochau & Blanck, *supra* note 2, at 308-09.

private efforts and evolving social attitudes if contributions to the pool of information represent a variety of research approaches. An additional benefit to having research assembled from a number of fields is that differing assumptions and viewpoints may be brought to the forefront as findings are compared and attempts are made to reconcile conclusions.[256]

In exploring disabled persons' employment, there also is a strong relationship between the content of the research questions and the validity of the findings.[257] For example, imagine that a project is designed to examine the efficacy of web-based marketing strategies of EWD retail and service companies. The study hypothesizes that e-commerce marketing strategies increase revenues more than traditional strategies. If it is the case, however, that web-based marketing programs are not technologically accessible to entrepreneurs or consumers with visual or learning impairments, the research question and subsequent findings are distorted because of the inadequacy of the study's design.

How does the lack of accessible technology in the hypothetical study distort the findings of the research? The distortion stems in part from the fact that the study is likely to lead to unwarranted and inaccurate conclusions about the impact of web-based marketing strategies on firm revenue for entrepreneurs with disabilities and sales projections to their customers.[258] It is apparent, therefore, that research on the continuum of work activities of persons with disabilities—entrepreneurial or otherwise—must consider the disability perspective, in addition to involving a variety of disciplines, perspectives, and methods.[259]

B. Researching Self-Employment and Entrepreneurs with Disabilities

In our broader program of study of the workforce of disabled persons, the LHP&DC is examining labor market supply and demand factors, temporary employment and job training activities, and workplace accommodations and technology. This section highlights implications of our program of study for entrepreneurs with disabilities.

Since 1990, the LHP&DC has been studying the labor market trends of more than 5000 persons with mental retardation and other impairments living in Okla-

---

256. *See generally* Bob Dole, *Are We Keeping America's Promises to People with Disabilities?—Commentary on Blanck*, 79 IOWA L. REV. 925 (1994) (discussing impact of research on policy). *See also* Corinne Kirchner, *Looking Under the Street Lamp: Inappropriate Uses of Measures Just Because They are There*, 7 J. DISABILITY POL'Y STUD. 77-90 (1996) (same); Schwochau & Blanck, *supra* note 2, at 308 (same).

257. *See generally* Peter David Blanck et al., 47 AM. PSYCHOL. 959 (1992) (discussing related ethical and research design questions); Robert Rosenthal & Peter David Blanck, *Science and Ethics in Conducting, Analyzing, and Reporting Social Science Research: Implications for Social Scientists, Judges, and Lawyers*, 68 IND. L.J. 1209 (1993) (same).

258. In large part, the distortion is also due to the fact that these individuals would not even be represented in the sample of research participants.

259. *See* Rob Kitchin, *The Researched Opinion on Research: Disabled People and Disability Research*, 15 DISABILITY & SOC'Y 25-47 (2000) (discussing emancipatory and empowering research strategies); Jennifer B. Mactavish et al., *"I Can Speak for Myself": Involving Individuals with Intellectual Disabilities as Research Participants*, 38 MENTAL RETARDATION 216-227 (2000) (describing a program of qualitative research focusing on the perspective of persons with disabilities); Kirsten Stalker, *Some Ethical and Methodological Issues in Research with People with Learning Disabilities*, 13 DISABILITY & SOC'Y 5-19 (1998) (discussing issues of choice and consent in research involving individuals with learning disabilities).

homa.[260] The investigation focuses on the participants' employment and economic positions as indicators of labor market progress. The research examines employment and economic status over time as they relate to personal and educational backgrounds, job capabilities and qualifications, job training strategies, involvement in community, and self-advocacy activities.

Two of the longitudinal investigation's findings are relevant to the study of self-employment. First, Oklahoma participants with mild and severe impairments were engaged in more competitive employment increasingly over time. The findings in Studies I, II, and III suggest that almost one quarter (21%) of EWD applicants were persons who have experienced competitive employment.[261] Further study will need to assess the characteristics of individuals who pursue self-employment after experiencing competitive employment activity. For example, what motivates these individuals to pursue self-employment? What economic and social barriers did these individuals face in prior competitive employment settings? What incentives, assistance, and supports do these individuals need to be successful in self-employment?

Second, the Oklahoma findings illustrate employment opportunities for a new generation of skilled workers with disabilities. Younger participants and those individuals with better job skills showed strong gains in employment.[262] These findings are consistent with the demand for workers with higher and diversified job skills highlighted in the first part of this Article. They suggest that increasing numbers of young persons with disabilities who have been educated in mainstream classrooms and who have mastered new computer technologies are fairing better in competitive employment than older persons with disabilities. Better job skills, greater independence in living, and more involvement in self-advocacy activities increasingly were related to success in employment.[263] Additional study must assess the extent to which these young and computer-literate employees come to view self-employment as a viable option for a career, either before or after competitive employment activities.

The present findings illustrate a relatively older cohort of entrepreneurs with disabilities; EWD applicants range in age from twenty-one to sixty-nine years old, with a mean age of forty-six.[264] Longitudinal and cross-sectional analysis of disabled entrepreneurs' background characteristics is necessary to understand whether variables like age and experience are related to pursuit of entrepreneurial activities and success in those ventures. Other background measures require study as well. For instance, Arnold and her colleagues are studying the characteristics of minority and women entrepreneurs with disabilities[265] and self-employment strategies in

260. BLANCK, EMERGING WORKFORCE, *supra* note 23, at 98.

261. See *supra* notes 185-88 and accompanying text for more information about the study findings.

262. Relative unemployment levels for participants declined by 23%, dropping from 37% in 1990 to 14% in 1998. Yet, more than three out of four (77%) of those participants not employed or employed in nonintegrated settings in 1990 remained in those settings in 1998. BLANCK, EMERGING WORKFORCE, *supra* note 23, at 126-27.

263. Over time the Oklahoma participants improved in their job capabilities, lived in more integrated settings, became involved in self-advocacy and citizenship activities, and reported enhanced accessibility to society. BLANCK, EMERGING WORKFORCE, *supra* note 23, at 102.

264. *See supra* notes 153-56 and accompanying text (discussing background measures of age).

265. RURAL INSTITUTE, *supra* note 8.

rural settings.[266]

In another line of study, Blanck and Steele conducted an exploratory investigation of Manpower Inc., the nation's largest staffing employer.[267] Manpower annually provides temporary employment opportunities to almost two million people worldwide. The U.S. Bureau of Labor Statistics estimates that between the years 1994 and 2005, temporary employment opportunities will grow by 55%. According to the Department of Labor's *Futurework Report*, technological growth will spur millions of new workers (with and without disabilities, young and old) to seek alternative work arrangements.[268]

The present study raises the question: In what ways will increasing experiences by persons with disabilities in temporary employment stimulate their entry into self-employment and entrepreneurial activities? The Manpower case study used qualitative methods, including interviews and review of archival documents, to help generate hypotheses about employment opportunities available to a sample of persons with physical and mental disabilities working for the company. The study focused on the importance of hiring and job training opportunities as labor force strategies that provide a bridge to full-time employment—predominantly at large companies—for persons with disabilities. Interviews of Manpower employees with a range of impairments suggest the company's investment in individualized training programs, skills assessment techniques, and career development strategies has been critical to its success in hiring and retaining disabled workers. The trends identified in the Manpower study are consistent with other studies, such as Schur's, that examine the reasons why disabled workers are more likely to pursue contingent alternative work arrangements.[269]

Several issues relating to the staffing industry warrant study in the context of self-employment of persons with disabilities. How can the staffing industry effectively and promptly transition people with disabilities from unemployment to traditional employment to self-employment? To what extent do individuals with disabilities working in the staffing industry gain work skills (e.g., in technology or computer use) that assist in their transition from unemployment to self-employment? What other means are available for disabled individuals to acquire technology training to prepare themselves for a wide range of employment opportunities? Study of these questions may suggest ways for policymakers, employers, health professionals, and others to expand public-private self-employment opportunities for disabled individuals by building on employment experiences in other contexts, countries, and cultures.[270]

Another area we have studied is the provision of workplace accommodations

266. *Id. at* http://ruralinstitute.umt.edu/rtcrural/SelfEm/monograph/IntroSelfEm.htm (linking to a study of self-employment in rural rehabilitation).

267. BLANCK & STEELE, *supra* note 142.

268. FUTUREWORK, *supra* note 5; Schur, *supra* note 37, at 1-3, 9-11 (noting trends in contingent workforce).

269. *See* Schur, *supra* note 37, at 10 (noting that individual choice and labor market constraints contribute to higher rates of disabled contingent workers).

270. Research is being conducted on self-employment and entrepreneurship in other countries. *See generally* DISABILITY AND SELF-DIRECTED EMPLOYMENT: BUSINESS DEVELOPMENT MODELS (Alfred Neufeldt & Alison Albright eds., 1998) (discussing comparative research); 19 INT'L J. PRAC. APPROACHES TO DISABILITY, *available at* http://rehab. educ.ucalgary.ca/people/gladnet/listings.html (discussing self-employment initiatives around the world).

for job applicants and employees with disabilities. In a series of studies at Sears, Roebuck and Co., a company with approximately 300,000 employees, we examined the case records of more than 600 workplace accommodations provided by the company during the years 1978 to 1998.[271] The findings show that most accommodations sampled required little or no cost. More than 75% required no cost, somewhat less than one quarter cost less than $1000, and less than 2% cost more than $1000. The average direct cost for accommodations was less than $30.

Little attention has been focused on the need for and use of accommodations by entrepreneurs with disabilities. The often low direct costs of accommodations for disabled employees have been shown to produce substantial economic benefits in terms of increased work productivity, workplace injury prevention, and reduced workers' compensation costs. Several lessons may be drawn from the Sears studies that warrant study in smaller organizations and in the operation of state programs like Iowa's EWD program. First, the degree to which Sears and other large and small companies provide workplace accommodations appears to have more to do with their corporate cultures, attitudes, and business strategies than with meeting the ADA's minimal obligations. This is evident from our interviews of EWD participants who reported that many disabled small business owners are inclined to provide workplace accommodations for their employees, in part because of their own experiences and attitudes.

Second, the average administrative cost to replace a Sears' employee was $1800 to $2400, roughly forty times the average direct cost of workplace accommodations for qualified workers. Thus, as reported in the interviews in Study III above, employee replacement, workers' compensation payments, and SSDI payments all potentially exceed the cost of accommodating and retaining the qualified worker with a disability. Sears, like many small and large companies, is realizing positive economic returns by investing in accommodations that enable disabled workers to return to or stay in the workforce, reduce the risk of workplace injury, and lower worker absenteeism.

Third, as illustrated by the present investigation showing the high proportion of entrepreneurial activity in the service, retail, and technology areas, accommodations involving universally designed technology enable employees with and without disabilities to perform jobs productively, cost-effectively, and safely. The technologically based accommodations (e.g., computer voice synthesizers) enabled workers with disabilities to perform essential job functions. Moreover, the direct costs attributed to such accommodations are lower than predicted when their fixed costs are amortized over time.[272]

The findings from the Sears studies and the present investigation suggest that many benefits and costs associated with labor force strategies involving accommo-

---

271. *See, e.g.*, PETER DAVID BLANCK, COMMUNICATING THE AMERICANS WITH DISABILITIES ACT, TRANSCENDING COMPLIANCE: 1996 FOLLOW-UP REPORT ON SEARS, ROEBUCK & CO. (1997); Peter David Blanck, *The Economics of the Employment Provisions of the Americans with Disabilities Act: Part I—Workplace Accommodations*, 46 DEPAUL L. REV. 877 (1997); Peter David Blanck, *Transcending Title I of the Americans with Disabilities Act: A Case Report on Sears, Roebuck and Co.*, 20 MENTAL & PHYSICAL DISABILITY L. REP. 278 (1996).

272. BLANCK, EMERGING WORKFORCE, *supra* note 23, at 150.

dations remain to be discovered and documented in small and large businesses.[273] As this study demonstrates, many entrepreneurs were attracted to small business ownership because they could "self-accommodate" themselves and their workers through adjustable scheduling, job sharing arrangements, child care support programs, and flexible health benefits policies.

In a related area of study, Berven and Blanck are illustrating the unanticipated consequences of technological innovation for workers with disabilities after passage of the ADA. We are conducting a review of economic activity in the assistive technology (AT) market, using data derived from the U.S. Patent and Trademark Office.[274] The investigation examines whether patent data may be used as one means of probing the link between ADA implementation, economic activity in the AT market, and entrepreneurship by persons with disabilities. As policies and laws expand the market for goods that improve accessibility, inventors and entrepreneurs are responding to meet the needs of consumers with disabilities. At the same time, AT is expanding labor market opportunities for entrepreneurs with disabilities as employment growth in America shifts from manufacturing to service jobs.[275]

Our findings generate other vital precepts that warrant study regarding the importance of technology to the self-employment of disabled workers. Research suggests that accessibility effectively may be built into workplaces, work equipment, and job and career training programs, rather than added on. As technology becomes more important to work, accessibility becomes more important. Technology also has the potential to make education, job training, and work more inclusive through individualized curricula and web-based learning. Thus, accessible technology has implications beyond work. For TWWIIA health care reform initiatives, web-based medicine will bring doctors to geographically isolated people or to entrepreneurs with disabilities. For WIA job training programs and welfare reform, web-based commuting and training will help reduce chronic unemployment and isolation among people with disabilities.

Similarly, the ADA seeks to remove barriers that hinder the inclusion of disabled persons in employment, public accommodations, and other social contexts. One of the law's goals is to make society accessible to people with disabilities as they affirm their civil rights and pursue employment goals.[276] For many persons with disabilities, the Internet plays a fundamental role in support of this mandate.

Blanck and Sandler are examining the application of the ADA's accessibility

---

273. *See* Blanck & Pransky, *Workers with Disabilities*, *supra* note 180, at 590 (discussing the need for further research on the costs, benefits and effects of workplace accommodation); *The Unintended Consequences of the Americans With Disabilities Act*, *infra* 85 IOWA L. REV. 1811 (featuring debate discussing benefits of workplace accommodations).

274. *See* PETER DAVID BLANCK, COMMUNICATING THE AMERICANS WITH DISABILITIES ACT, TRANSCENDING COMPLIANCE: A CASE REPORT ON SEARS, ROEBUCK & CO. (1994); PETER DAVID BLANCK, COMMUNICATIONS TECHNOLOGY FOR EVERYONE: IMPLICATIONS FOR THE CLASSROOM AND BEYOND (1994); Berven & Blanck, *supra* note 53, at 9-120 (classifying AT as any item, piece of equipment, or product system (i.e., acquired commercially, modified, or customized) that is used to improve the capabilities of individuals with disabilities); Heidi M. Berven & Peter David Blanck, *Assistive Technology Patenting Trends and the Americans with Disabilities Act*, 17 BEHAV. SCI. & LAW 47 (1999).

275. *See* FUTUREWORK, *supra* note 5 (describing this trend).

276. *See* BLANCK, EMERGING WORKFORCE, *supra* note 23, at 3-4.

requirements to private Internet web sites and services.[277] As small and large business environments transform themselves with the use of web-based applications, entrepreneurs, employees, and customers with disabilities increasingly will benefit from accessible web design in areas such as work skill enhancements, distance training, wellness programs, and injury prevention strategies.[278] Internet activities, accessible technologies, and self-employment of persons with disabilities all warrant study.[279]

In addition, public and private employment strategies may beneficially impact the process of technology innovation and induce market activity for accessible Internet sites, goods, and services.[280] We are examining the ways that the ADA and its civil rights protections function in such a "technology stimulating" manner. The "push-pull" of disability policy is fostering entrepreneurship by individual and corporate inventors. The regulatory "push" introduced by the ADA expanded the market for accessible technology to include a range of consumer groups, including persons with disabilities, employers, and governmental entities. Financial incentives (the "pull") provide research and development opportunities to private Internet inventors and entrepreneurs.[281]

One way to enhance e-commerce growth is to increase support for programs that encourage small business innovation and entrepreneurship in the private sector. These programs are important in light of studies showing that web accessibility solutions are inexpensive and reflect effective web design strategies.[282] Analysis is warranted of usage demographics, economic benefits, and attitudes prior to and after accessible web-based services and innovations are implemented.[283]

Competition within the e-commerce market for consumers with and without disabilities also will foster technological innovation and entrepreneurship. As the Internet expands markets and initiatives for goods and services, inventors, manufacturers, retailers, and employers are responding to meet the needs of consumers

---

277. *See* Peter David Blanck & Leonard A. Sandler, *ADA Title III and the Internet: Technology and Civil Rights*, 24 MENTAL & PHYSICAL DISABILITY L. REP. (2000) (discussing this issue). In 1999, this issue received national attention with the filing of a class action lawsuit by the National Federation for the Blind against America Online (AOL). *See* Cynthia D. Waddell, *The National Federation of the Blind Sues AOL*, 2000 A.B.A. SEC. INDIVIDUAL RTS. & RESP., at 22-24.

278. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 30 (recommending that distance learning programs be used to provide training and technical assistance to entrepreneurs with disabilities).

279. Web-based activities of small companies that have an online presence (e.g., certain travel agents, on-line catalogues, and retail stores) may be subject to ADA Title III provisions.

280. *See* Berven & Blanck, *supra* note 53, at 47-71 (discussing the "technology forcing" components of federal laws); *supra* note 274.

281. Blanck et al., *supra* note 54 (examining the relation among corporate culture, technology, and disability).

282. *See Hearing on the Applicability of the Americans with Disabilities Act to Private Internet Sites Before the Subcomm. on the Constitution of the House Comm. on the Judiciary*, 106th Cong. (2000) (on file with authors) (testimony of Judy Brewer) (discussing accessible web design). In addition, a tax credit is available to small businesses to offset expenses incurred for web site accessibility improvements. Iowa AD Tax Credit Act, *supra* note 175.

283. Study is underway of a financial services company as it transitions to an accessible web-based private Internet site and service. Peter David Blanck & David Klein, *The New Nexus Among Accessible Internet Sites and Services, the ADA, and Market Advantage*, WORKING PAPERS OF THE LAW, HEALTH POLICY & DISABILITY CENTER. For the Center's website, go to http://www.its.uiowa.edu/law/index.htm; for a description of the development of accessible web pages, go to http://sbaloans.com/textonly/.

with disabilities, those who may become disabled, and the elderly. The accessible e-commerce marketplace holds vast profit-making opportunities.[284]

Unfortunately, studies show that only 10% of people with disabilities use the Internet, as compared to 38% of people without disabilities.[285] Without effective access to the Internet, individuals with disabilities like blindness, mobility and sensory impairments, and neurological and learning impairments will continue to face obstacles to independent and productive lives.[286] Moreover, Kruse and Hyland's analysis of CPS data from 1991 through 1997 illustrates that only half of self-employed, home-based employees with disabilities use computers in their work, as compared to two-thirds of home-based workers without disabilities.[287] Although technology training and Internet access are important, achievement of equal employment and full inclusion requires more than advancing Internet and computer technology. It requires study of long-standing discrimination and biases toward individuals with disabilities in all parts of American society.[288]

C. *Research Questions and Issues Unresolved*

The findings in this investigation raise myriad questions and generate hypotheses warranting study. The economic effects of public and private employment initiatives on labor force participation and pursuit of self-employment must be examined. Economic theory may predict that, to the extent that these initiatives increase the earnings of disabled workers and help eliminate discrimination in the labor market, they should create incentives for disabled individuals to devote hours to the labor market. The incorporation of those actively seeking work for pay, like applicants to EWD-type programs, into analyses, therefore, would allow for an assessment of whether public and private initiatives have had any influence on the number of individuals choosing employment over federal assistance.

One of the expected benefits of the new generation of public initiatives—ADA, TWWIIA, WIA, Medicaid Buy-In—is a reduction in disabled individuals' long-term dependence on SSI or SSDI. Therefore, analysis of labor supply decisions—such as the decision to pursue self-employment—would help to isolate

---

284. *See* Jenny Strasburg, *Pushing for Net Access Activists Point Out that Big Profits Await Web Sites that Accommodate the Disabled*, S.F. EXAMINER, Mar. 26, 2000, at B1 (discussing profit-making opportunities).

285. *See* DISABILITY RIGHTS ADVOCATES, DISABILITY WATCH 2001: THE STATUS OF PEOPLE WITH DISABILITIES IN THE UNITED STATES, (2001) (discussing these and related statistics from December 1998 CPS and March 1999 by the Census Bureau); KAYE, COMPUTER AND INTERNET USE, *supra* note 20 (citing findings for persons with work-related disabilities).

286. *Cf.* Steve Gutterman, *Disabled Find Access to Work at Home by Way of the Internet Trends: Many are Discovering the Freedom Afforded by Computers*, L.A. TIMES, Mar. 27, 2000, at C5 (suggesting that access to the web can lead to an economic boom for disabled persons); Strasburg, *supra* note 284 (discussing the capability of the web in helping disabled persons lead more independent lives).

287. *See* Kruse & Hyland, *supra* note 64, at 15 (finding that among home-based workers, computers are used by 49.5% of workers with disabilities and by 60% of workers without disabilities).

288. *See Hearing on the Applicability of the Americans with Disabilities Act to Private Internet Sites Before the Subcomm. on the Constitution of the House Comm. on the Judiciary*, 106th Cong. (2000) (testimony of Peter David Blanck) (discussing accessibility to the Internet); Harlan Hahn, *Accommodations and the ADA: Unreasonable Bias or Biased Reasoning?*, 21 BERKELEY J. EMP. & LAB. L. 166, 167 (2000) (discussing bias facing disabled persons); Peter David Blanck & Michael Millender, *Before Civil Rights: Civil War Pensions and the Politics of Disability in America*, 1862-1907, 52 ALA. L. REV. (forthcoming 2000) (manuscript at 35-41, on file with authors) (discussing history of attitudinal bias facing Americans with disabilities).

whether changes in nonwork sources of income explain the employment patterns of persons with disabilities. In the present study, 40% of EWD applicants report financial assistance from family and friends as their primary means of support. Another 28% report their primary source of support as being from SSDI and state workers' compensation payments.

Moreover, to the extent that disabled entrepreneurs place importance on access to health care in their decisions regarding labor force participation, changes in the provision of health care, in regulations regarding health care coverage, and in public assistance programs could be considered as explanations for patterns in existing studies. As illustrated by the Manpower study, the effects of private initiatives, such as changes in the nature of job training, also need to be assessed.

Importantly, the predominant role of employment discrimination as a correlate of self-employment activity by disabled individuals warrants careful study. Discriminatory assumptions about disabled entrepreneurs should be factors used in the analysis of labor force participation, in addition to considerations of productivity, case closure status, and measures of business success. As a result, research models must incorporate measures of education,[289] work experience, and success at obtaining start-up capital through public and private sources.[290]

Measures of business success and work productivity, as illustrated by the Sears accommodations studies described above, also must assess the provision of effective accommodations and availability of accessible technology. Examinations further need to consider the sizeable portion of the disabled population whose impairments would make effective work in self-employment or in larger business settings possible, if accommodations were to be provided.[291] Lastly, studies may tailor analytic models to maximize comparability with earlier research and thereby allow for assessment of changes over time. In so doing, changes in factors previously found to influence self-employment of individuals with disabilities may be identified.

By themselves, the number of questions that have yet to be addressed suggests the complex nature of researching the entrepreneurial work environment. There is a lot we do not know. We hope that our program of study will encourage others to undertake the task of testing predictions regarding the workforce of individuals with disabilities across the continuum of employment possibilities. Caution is warranted, however, to the extent that viewpoints are inherently embedded within any research model.

Thus, economic theory would predict that an employer structures the firm's work environment to enable workers to attain the desired level of productivity, given the costs and benefits associated with alternative orderings and available technologies and accommodations. If the majority of workers are viewed as unim-

---

289. In the present study, a high proportion of EWD applicants and successful entrepreneurs had at least a high school diploma. *See supra* notes 160-61 and accompanying text.

290. Recent initiatives have enhanced entrepreneurs with disabilities' access to capital through micro-loan funds. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 37-38 (discussing how micro-enterprise loan funds give disabled entrepreneurs access to capital in ways that complement DVRS rehabilitation-based entrepreneurial programs).

291. *See supra* notes 271-73 (noting that the purchase of workplace accommodations by self-employed entrepreneurs with disabilities may be facilitated by tax credits).

paired, the work environment may be expected to foster assumptions that workers have no limitations on their abilities to see, hear, walk, climb stairs, lift, grasp door knobs, write, speak, and so on.[292] Because of employers' incentives to maximize profits, this environment becomes the baseline manner in which to order work and the work environment given the perceived characteristics of the average individual in the relevant labor market. Accommodations, necessitated by the appearance of disabled workers in the candidate pool or workforce, represent deviations from an assumed efficient status quo.

The same logic may be applied to the limited availability of traditional lending sources to disabled entrepreneurs, given the findings of low proportions (7%) of start-up capital received by EWD participants from banks or investors. If the majority of entrepreneurs with disabilities are viewed by lenders, banks, or investors as "impaired" or less productive, the capitalization process itself builds on preconceived attitudes that disabled entrepreneurs will have less ability to repay loans or be productive than their nondisabled counterparts. Once again, the nondisabled environment becomes the baseline, with the result that disabled individuals have more difficulty finding the capital to support their businesses. Given that the major reason for small business failure is undercapitalization,[293] a cycle of failure based on attitudinal bias is perpetuated.

These illustrations reflect a narrow viewpoint. The assumption that the status quo is efficient in an absolute sense is open to debate. The calculus changes when individuals stop to consider the possibility that the physical and social environment itself unnecessarily contributes to making a functional limitation into a disability.[294]

V. CONCLUSION

This Article has explored entrepreneurs with disabilities to help implement public and private initiatives designed to enhance self-employment opportunities for persons with disabilities.[295] The analysis may aid assessments of initiatives in health care reform (e.g., TWWIIA and Medicaid Buy-In programs to ensure affordable health insurance to disabled persons entering or returning to the workforce), welfare reform (e.g., WIA efforts to enhance job skills development), technological reform (e.g., efforts to ensure that workplace technologies are accessible to people with disabilities), and attitudinal change (e.g., the ADA as a model to eliminate employment discrimination).[296]

---

292. Schwochau & Blanck, *supra* note 2, at 309-10 (citations omitted). *See* Harlan Hahn, *The Political Implications of Disability Definitions and Data*, 4 J. DISABILITY POL'Y STUD. 41, 46-49 (1993) (discussing sociopolitical perspectives on disability, which focus on interactions between individuals and their environment).

293. *See* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 30 (noting that access to capital is central to small business success).

294. *See id.* at 25 (discussing entrepreneurs with disabilities' difficulty in receiving traditional funding, and noting alternative funding).

295. *See id.* at 42 (recommending the development of reliable and valid information about entrepreneurs with disabilities).

296. *See* PRESIDENT'S COMMITTEE, *supra* note 6 (listing barriers to and benefits of self-employment and providing self-employment profiles of disabled entrepreneurs); *see generally* Nancy E. Clarke & Nancy M. Crewe, *Stakeholder Attitudes Toward ADA Title I: Development of an Indirect Measurement Method*, 43 REHABILITATION COUNSELING BULL. 58 (2000) (describing survey method to

Researchers must gather information on persons with visible and nonvisible disabilities, disabilities that are mitigated, by medication or AT devices, for example, and multiple disabilities. Despite encouraging trends, further study must examine the causes of high unemployment levels facing persons with disabilities.[297] Policymakers, employers, and members of the disability community must discuss labor force strategies in ways that articulate the values and goals of the nation's policies affecting persons with disabilities. This dialogue must include the collaboration of, indeed be driven by, persons with disabilities.

As persons with disabilities attain and retain self-employment, research and evaluation provide a means to document public and private initiatives and best practices. The identification of effective intervention strategies like job training, health benefits planning, and workplace accommodations is an important task.[298] To address these issues, the LHP&DC has organized a Researchers' Symposium to increase knowledge of research design and methodology involving workers with disabilities.[299] The symposium is intended to facilitate dialogue among researchers in law, sociology, economics, psychology, and education about study of issues such as labor force participation, assistive technology and workplace accommodations, and disability culture and diversity. The development of a cumulative body of research is needed, as no single study or set of studies provides definitive answers. The collection and articulation of this information will help shape the lives of the next generation of entrepreneurs with disabilities who will become part of the workforce of the twenty-first century.

---

study attitudes toward individuals with disabilities).

297. *Cf.* P.R. LIND & CO., GETTING DOWN TO BUSINESS, *supra* note 7, at 45 (recommending that disabled entrepreneurs be included in the list of those automatically presumed eligible for the SBA's 8(A) Business Development and Small Disadvantaged Business Programs).

298. *See* Colignon, *supra* note 83, at 129-47 (suggesting that studies need to be conducted); Dole, *supra* note 256, at 927-34 (discussing disability policy and why studies are important).

299. The web address for the Law, Health Policy & Disability Center is http://www.its.uiowa.edu/law/index.htm. The address the Researchers' Symposium is http://www.its.uiowa.edu/law/symposium/index.html. The symposium is sponsored by the National Institute on Disability Rehabilitation and Research.

Appendix I – Demographic Data Tables
Entrepreneurs with Disabilities Program Applicants and Interviewees

		Study II				Study III
Background Measures[1]		Applicants to the EWD Program[2]	Clients Receiving Any Services from EWD[3]	Clients Receiving Financial Assistance[4]	Clients Closed Successfully by DVRS[5]	Clients Interviewed for this Study[6]
Gender	Male	67.1% (341)	73.5% (166)	77.9% (95)	78.6% (33)	83.3% (25)
	Female	32.9% (167)	26.5% (60)	22.1% (27)	21.4% (9)	16.7% (5)
Age	Mean	45.63[7]	45.40[8]	45.8[9]	44.07[10]	44.22[11]
	Minimum	21	21	21	27	27
	Maximum	69	66	66	63	63
Race	White[12]	95.6% (451)[13]	95.7% (200)[14]	97.3% (109)[15]	100% (42)[16]	92.6% (25)[17]
	African-American	2.8% (13)	1.4% (3)	.9% (1)	0	3.7% (1)
	American Indian[18]	1.1% (5)	1.4% (3)	1.8% (2)	0	3.7% (1)
	Asian/Pacific Islander	.6% (3)	1.4% (3)	0	0	0
Marital Status	Married	51.7% (244)[19]	52.6% (110)[20]	56.3% (63)[21]	64.3% (27)[22]	66.7% (18)[23]
	Divorced	25.4% (120)	25.8% (54)	20.5% (23)	16.7% (7)	11.1% (3)
	Never Married	18.2% (86)	18.2% (38)	19.6% (22)	16.7% (7)	18.5% (5)
	Separated	2.8% (13)	2.4% (5)	2.7% (3)	2.4% (1)	3.7% (1)
	Widowed	1.9% (9)	1% (2)	.9% (1)	0	0
Education	<12 years	10.7% (49)[24]	12.5% (26)[25]	9.0% (10)[26]	4.8% (2)[27]	7.4% (2)[28]
	High School	48.7% (224)	45.2% (94)	45.0% (50)	56.1% (23)	48.1% (13)
	13-15	28.7% (132)	29.8% (62)	32.4% (36)	24.4% (10)	29.6% (8)
	16	8.9% (41)	9.1% (19)	11.7% (13)	14.6% (6)	14.8% (4)
	>16	3% (14)	3.3% (7)	1.8% (2)	0% (0)	0

1. Percentages are based on totals of valid data and do not reflect any missing data. Sample sizes (N) differ for each variable because of missing data.
2. N=509, including people who attended orientation services but did not formally apply to the EWD program.
3. N=226, including people who received any service other than orientation from EWD. Iowa Department of Vocational Rehabilitation Services (DVRS) and Iowa Department of the Blind (IDB) clients are included. Although some people may be accepted without having received services, this was not tracked by the EWD program.
4. N=112.
5. N=42, includes only people who were closed by DVRS in closure status 26 (closed successfully), in employment status 3 (self-employed), that received financial assistance from EWD. No IDB clients are included.
6. N=30. Thirteen clients who were interviewed were closed successfully by DVRS. All of the interviewed clients had opened businesses, and received financial assistance from the EWD program. Three of the interviewees were clients of IDB. The other twenty-seven were clients of DVRS.
7. N=469, includes only DVRS clients. Age is calculated as of January 2000.
8. N=208.
9. N=112.
10. N=42.
11. N=27.
12. "White" includes three people of Hispanic origin as applicants, two of whom are included in those receiving services, and one of whom is included in the DVRS successful closure column. No persons of Hispanic origin were identified in the interviewed clients category. One person who was interviewed self-identified ethnicity as Mexican, but was not identified by DVRS as being of Hispanic origin.
13. N=472, includes only DVRS clients.
14. N=209.
15. N=111.
16. N=42.
17. N=27.
18. American Indian includes one person of Hispanic origin, who is also included in those receiving services, but not in the successful closure category.
19. N=472, includes only DVRS clients.
20. N=209.
21. N=112.
22. N=42.
23. N=27.
24. N=460, includes only DVRS clients.
25. N=208.
26. N=111.
27. N=41.
28. N=27.

Appendix I – Demographic Data Tables
Entrepreneurs with Disabilities Program Applicants and Interviewees

Disability Measures		Study II: Applicants to the EWD Program	Study II: Clients Receiving Any Services from EWD	Study II: Clients Receiving Financial Assistance	Study II: Clients Closed Successfully by DVRS	Study III: Clients Interviewed for this Study
Primary Disability Category[1]	Orthopedic	46.5% (218)[2]	48.1% (99)[3]	49.1% (54)[4]	41.5% (17)[5]	48.1% (13)[6]
	Mental or Emotional	19.8% (93)	13.6% (28)	11.8% (13)	9.8% (4)	11.1% (3)
	Neurological Disorder	8.5% (40)	11.2% (23)	8.2% (9)	12.2% (5)	7.4% (2)
	Cardiac or Circulatory	3.4% (16)	2.9% (6)	2.7% (3)	2.4% (1)	0
	Traumatic Brain Injury	3.2% (15)	3.4% (7)	4.5% (5)	2.4% (1)	0
	Alcohol Abuse or Dep.	3% (14)	3.9% (8)	3.6% (4)	7.3% (3)	11.1% (3)
	Allergic or Endocrine Conditions	3% (14)	3.9% (8)	5.5% (6)	7.3% (3)	0
	Musculo-skeletal or Connective Tissue	2.1% (10)	3.4% (7)	4.5% (5)	4.9% (2)	3.7% (1)
	Mental Retardation	1.7% (8)	1% (2)	1.8% (2)	2.4% (1)	0
	Hearing	1.3% (6)	1% (2)	0	0	0
	Genito-urinary System	1.1% (5)	2.4% (5)	2.7% (3)	2.4% (1)	7.4% (2)
	Visual[7]	1.1% (5)	1% (2)	.9% (1)	2.4% (1)	3.7%(1)
	Speech Impairment	.2% (1)	0	0	0	0
	Other	5.1% (24)	4.4% (9)	4.5% (5)	4.9% (2)	7.4% (2)
Circum-stances of Disability	Disease Process	52.4% (247)[8]	53.4% (111)[9]	53.2% (59)[10]	50% (21)[11]	63% (17)[12]
	Accident at Work	21.2% (100)	19.2% (40)	20.7% (23)	16.7% (7)	22.2% (6)
	Congenital	11.7% (55)	13% (27)	9.9% (11)	11.9% (5)	0
	Accident not at Work	11.1% (52)	11.1% (23)	12.6% (14)	19% (8)	11.1% (3)
	Other	3.6% (17)	3.4% (7)	3.6% (4)	2.4% (1)	3.7% (1)

1. Specific disability diagnoses were categorized into the DVRS major categories, where possible, based on categories listed in the "Instructions for Completion and Processing of Client Service Records CSR-300" provided by the Iowa Division of Vocational Rehabilitation. Where a DVRS category was not applicable, disability diagnoses were categorized according to The Merck Manual (1982, 14th ed.).
2. Sample size (N)=469.
3. N=206.
4. N=110.
5. N=41.
6. N=27.
7. Does not include clients of Iowa Department for the Blind (IDB). Most EWD clients with visual disabilities are served by IDB, not DVRS.
8. N=471.
9. N=208.
10. N=111.
11. N=42.
12. N=27.

Appendix I – Demographic Data Tables
Entrepreneurs with Disabilities Program Applicants and Interviewees

		Study II				Study III
Employment and Income Measures		Applicants to the EWD Program	Clients Receiving Any Services from EWD	Clients Receiving Financial Assistance	Clients Closed Successfully by DVRS	Clients Interviewed for this Study
Work Status at Application	Competitive Labor Market	20.7% (97)[1]	24.5% (51)[2]	21.4% (24)[3]	21.4% (9)[4]	25.9% (7)[5]
	Self-Employed	8.5% (40)	8.2% (17)	10.7% (12)	11.9% (5)	14.8% (4)
	Sheltered Workshop	.6% (3)	0	0	0	0
	Homemaker	.4% (2)	.5% (1)	.9% (1)	0	0
	Business Employment Program	.2% (1)	0	0	0	0
	Not Working - Other	66% (309)	63.5% (132)	66.1% (74)	64.3% (27)	59.3% (16)
	Not Working - Student	3% (14)	3.4% (7)	.9% (1)	2.4% (1)	0
	Not Working - Trainee	.2% (1)	0	0	0	0
	Unpaid Family Worker	.2% (1)	0	0	0	0
Weekly Earnings at Application	Mean	$188.56[6]	$182.67[7]	$179.33[8]	$176.50[9]	$230.09[10]
	Minimum	$8	$10	$10	$50	$18
	Maximum[11]	$999	$550	$550	$415	$530
Weekly Hours Worked at Application	Mean	27.74[12]	28.67[13]	29.47[14]	34.64[15]	29.18[16]
	Minimum	0	0	1	15	1
	Maximum	75	75	75	75	75

1. Sample size (N)=468.
2. N=208.
3. N=112.
4. N=42.
5. N=33.
6. N=140.
7. N=67.
8. N=36.
9. N=14.
10. N=11.
11. Maximum weekly earnings at application may be truncated because earnings greater than $999 per week are recorded in the DVRS database as $999.
12. N=145.
13. N=70.
14. N=36.
15. N=14.
16. N=11.

Appendix I - Demographic Data Tables
Entrepreneurs with Disabilities Program Applicants and Interviewees

		Study II				Study III
Support and Assistance Measures		Applicants to the EWD Program	Clients Receiving Any Services from EWD	Clients Receiving Financial Assistance	Clients Closed Successfully by DVRS	Clients Interviewed for this Study
Primary Source of Support at Application	Family and Friends	39.7% (147)[1]	36.4% (59)[2]	37.5% (33)[3]	34.4% (11)[4]	35% (7)[5]
	SSDI	20.5% (76)	24.1% (39)	22.7% (20)	25% (8)	25% (5)
	Public Assistance	18.1% (67)	19.1% (31)	19.3% (17)	12.5% (4)	10% (2)
	Worker's Compensation	7.8% (29)	4.9% (8)	5.7% (5)	9.4% (3)	0
	Public Institution - Tax Supported	1.4% (5)	.6% (1)	1.1% (1)	0	5% (1)
	Annuity or Other Insurance	.3% (1)	0	0	0	0
	Client's Earnings[6]	0	0	0	0	0
	General Assistance	0	0	0	0	0
	Private Relief Agency	0	0	0	0	0
	All Other Public Support	5.7% (21)	6.8% (11)	9.1 (8)	12.5% (4)	10% (2)
	All Other	6.5% (24)	8.0% (13)	4.5% (4)	6.3% (2)	15% (3)
Monthly Public Assistance at Application	Mean	$357.05[7]	$399.30[8]	$369.24[9]	$351.20[10]	$341[11]
	Minimum	$0	$0	$0	$166	$457
	Maximum	$865	$865	$625	$470	$625

1. Sample size (N)=370.
2. N=162.
3. N=88.
4. N=32.
5. N=20.
6. No client was reported to have the client's own earnings (including earnings, interest, dividends, or rent) as the primary source of support. This may be an anomaly of the DVRS system when gathering data to provide to the investigators. There is no way to determine from the DVRS supplied data whether this was an error.
7. N=100.
8. N=40.
9. N=21.
10. N=5.
11. N=2.

Appendix I – Demographic Data Tables
Entrepreneurs with Disabilities Program Applicants and Interviewees

		Study II				Study III
Support and Assistance Measures		Applicants to the EWD Program	Clients Receiving Any Services from EWD	Clients Receiving Financial Assistance	Clients Closed Successfully by DVRS	Clients Interviewed for this Study
People receiving SSDI, SSI, and Using Related SSA Work Incentives	SSDI	128	59	26	9	3
	SSI	68	30	14	3	2
	PASS	4	0	0	0	0
	IRWE	1	0	0	0	0
	1619(A)	0	0	0	0	0
	1619(b)	0	0	0	0	0
Total Years in DVRS Services[1]	<1	17.6% (82)[2]	14.1% (29)[3]	13.5% (15)[4]	7.1% (3)[5]	7.7% (2)[6]
	1-2	25.2% (117)	20.5% (42)	20.7% (23)	19% (8)	26.9% (7)
	2-3	23.9% (111)	26.8% (55)	25.2% (28)	33.3% (14)	26.9% (7)
	3-4	14.0% (65)	20.5% (42)	25.2% (28)	31% (13)	30.8% (8)
	4-5	7.5% (35)	6.8% (14)	6.3% (7)	2.4% (1)	3.8% (1)
	5-6	3.9% (18)	2.9% (6)	2.7% (3)	0	0
	6-7	3.9% (18)	5.4% (11)	3.6% (4)	2.4% (1)	3.8% (1)
	7-8	1.5% (7)	1.0% (2)	.9% (1)	2.4% (1)	0
	8-9	1.5% (7)	1.5% (3)	.9% (1)	0	0
	9-10	.4% (2)	.5% (1)	.9% (1)	2.4% (1)	0
	>10	.6% (3)	0	0	0	0

BEST COPY AVAILABLE

1. Total years reflect the sum of the days spent in each DVRS system status while the client is in the DVRS system. A client is coded in the DVRS system in a particular status at any given time. The number of days in each status is reported by the DVRS system.
2. Sample size (N)=65.
3. N=205.
4. N=111.
5. N=42.
6. N=26.

Appendix I – Demographic Data Tables
Entrepreneurs with Disabilities Program Applicants and Interviewees

		Study II				Study III
Business Information		Applicants to the EWD Program	Clients Receiving Any Services from EWD	Clients Receiving Financial Assistance	Clients Closed Successfully by DVRS	Clients Interviewed for this Study
Proposed Business Category at Application	Service	54.1% (226)[1]	53.2% (117)[2]	52.5% (64)[3]	59.5% (25)[4]	60.0% (18)[5]
	Retail	31.8% (133)	31.4% (69)	29.5% (36)	23.8% (10)	23.3% (7)
	Manufacturing	6.2% (26)	5.5% (12)	3.3% (4)	0	3.3% (1)
	Agriculture	3.3 % (14)	4.5% (10)	7.4% (9)	9.5% (4)	6.7% (2)
	Wholesale	1.7% (7)	1.8% (4)	2.5% (3)	2.4% (1)	0
	Construction	2.6% (11)	3.6% (8)	4.9% (6)	4.8% (2)	6.7% (2)
	Nonprofit	.2%(1)	0	0	0	0

1. Sample size (N)= 418.
2. N= 220.
3. N= 122.
4. N= 42.
5. N= 30.

BEST COPY AVAILABLE

APPENDIX II

STRUCTURED AND OPEN-ENDED INTERVIEW QUESTIONS:

SUMMARY FORM

I. BACKGROUND

1. May we use your real name, or would you prefer that we use an alias?

2. What is your current age?

3. What is your gender?

4. How would you describe your ethnicity?

5. Do you have a life partner/spouse? Children?

6. What is your highest level of education?

7. What is your disability? When was its onset?

8. Are you active in any community organizations or volunteer groups?

II. EMPLOYMENT HISTORY

9. Did you have any employment training before or after you sustained the injury causing your disability?

10. Do you have any computer skills? What type?

11. Were you employed before the onset of your disability?

12. In what field were you previously employed?

13. What was your gross annual income in your previous field of employment?

14. How many hours a week did you work on average in your previous employment?

15. Did you have health insurance with your previous employment?

16. What was the scope of your previous health insurance coverage? What was your personal cost?

III. SELF-EMPLOYMENT

17. Why did you start your own business?

18. Were your reasons related to the onset of your disability?

19. What type of business do you have?

20. How long have you been in business?

21. What market do you serve (i.e., local, regional, national, international)?

22. Is it a new business, an expansion of an old business or hobby, an acquisition?

23. Did you have any previous experience in the field of your new business?

24. Do you currently have any other paid employees? How many?

25. Do any of your employees have disabilities?

26. Do you look to hire employees with disabilities when possible?

27. Do you have health insurance currently with your new business?

28. What is the scope of your current health insurance coverage? What is your personal cost?

29. What was the total cost to begin your own business?

30. What funding sources did you use to begin new business?

31. What start-up funds did you receive from EWD?

32. What start-up funds did you receive from personal or family sources?

33. What start-up funds did you receive from other sources, such as bank loans?

34. Have you required any accommodations or used assistive technology in starting or managing your business?

35. Do you receive any tax credits for any accommodations you use?

36. What is the gross annual revenue in your business?

37. What was your gross annual revenue last quarter?

38. What is your gross annual income with your new business?

39. How many hours do you work on average per week?

40. What is your future plan for your business (e.g., expansion, sale of business, maintenance)?

41. Do you plan to remain self-employed or to seek employment elsewhere?

IV. EWD

42. How did you hear about EWD?

43. Describe the interactions among referring counselor and EWD staff?

44. What has your experience been with the EWD staff?

45. Describe the time-line of your experiences with the EWD program?

46. What has your experience been with the consultants the EWD program has provided?

47. What services did the consultants provide for you/your business?

48. Could you have started your business without the EWD services? Could you perform these services by yourself now?

49. How long did it take to open your business after your first contact with EWD?

V. GENERAL QUALITY OF LIFE AND INTERACTION WITH POLICY AND LAW

50. What was your quality of life before beginning your own business?

51. What is your current status with the State Vocational Rehabilitation Program, EWD, or the Department for the Blind?

52. Have you ever received support from SSI, workers' compensation program, or Plan for Achieving Self Support (PASS)? If so, for how long?

53. Have you encountered discrimination in trying to find employment after the onset of your disability?

54. Do you have any knowledge of the Americans with Disabilities Act (ADA)?

55. Did you know about the ADA before the onset of your disability?

56. What have been your major life challenges?

57. Are your life challenges generally related to your disability or to being an entrepreneur?

58. What do you consider to be your major life successes?

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC
Educational Resources Information Center

CE083427

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Emerging Workforce of Entrepreneurs with Disabilities: Preliminary Study of Entrepreneurship in Iowa	
Author(s): Blanck, Peter David; Sandor, Leonard A.; Schmeling	
Corporate Source: Iowa Law Review	Publication Date: 2000

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☒

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature:	Printed Name/Position/Title: Elizabeth Davis, Executive Editor
Organization/Address: Iowa Law Review, 190 Boyd Law Building, Melrose + Byington, Iowa City, IA 52242	Telephone: 319.335.9511 FAX:
	E-Mail Address: ilr@uiowa.edu Date: 11.27.02

(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Acquisitions Coordinator
ERIC Clearinghouse on Adult, Career, and Vocational Education
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: http://ericfacility.org

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

CE083427

I. DOCUMENT IDENTIFICATION:

Title: Emerging Workforce of Entrepreneurs with Disabilities	
Author(s): Blanck, Sandler, Schmeling, Schartz	
Corporate Source:	Publication Date: Aug 2000

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☒

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: Peter D. Blanck/jm	Printed Name/Position/Title: Peter D. Blanck, Professor
Organization/Address: University of Iowa College of Law, 431 BLB, Iowa City IA 52242	Telephone: 319-335-9043 FAX: 319 335-9764
	E-Mail Address: peter-blanck@uiowa.edu Date: 6/18/02

(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Cheryl Grossman
Processing Coordinator
ERIC Clearinghouse on Adult, Career, and Vocational Education
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: http://ericfacility.org

EFF-088 (Rev. 2/2001)